

International Cattle · Book

and LIVE STOCK DIGEST





A SPLENDID SPECIMEN OF A HOLSTEIN COW.

INTERNATIONAL CATTLE BOOK AND LIVE STOCK DIGEST

INTRODUCTION

HISTORY tells us that in every nation farmers have been compelled to resort to cattle raising and dairying when population becomes dense, and land, labor and foodstuffs become high in price. Every country has experienced the results of grain farming. The pioneer invariably broke the virgin soil and immediately became a miner instead of a farmer for in his growing crops he took from the soil the virgin fertility. Because he marketed his grains and grasses in the raw state, he sold this fertility and considered as profit the price he received for it. As long as the process remained profitable all was well, but eventually it became apparent that lands had declined perceptibly in their productiveness, crops became smaller and agriculture unprofitable.

It is then that livestock is introduced and, by marketing through the animals the grains and grasses, a large percentage of the fertility is returned to the field. For a period of time, livestock and grain farming suffice, but eventually conditions become even more intense and then to make certain profit and send even more fertility back to the land, the dairy cow is employed; for of all farm animals she is the most economical producer of food for mankind and the greatest conservor of the soil.

It is evident that grain farming is a profitable source of agriculture so long as the strength of the land will permit its pursuit. A smaller investment is necessary to merely raise grains and grasses and market them in their raw state than to devote attention to livestock and dairy farming, but when the time comes that enough of the fertility of the soil has been removed to make crop yields

small, it is absolutely impossible to grain-farm profitably without a large expenditure for commercial fertilizers and the ploughing under of green crops for replacing fertility and humus. Even the profits are doubtful and all history and the experience of every country denotes that livestock farming and dairying must be followed by farm operators if agriculture is to be permanent and profitable.

It is not only possible through the use of livestock and dairying to rebuild the fertility of the soil, but it is possible to farm profitably on the lands which are considered worn out and which can often be purchased for less than the improvements on them cost.

It does not require very much observation when travelling through the country to determine which sections are devoted to livestock and dairy farming. It is unnecessary to ask questions. The prosperity of a community denotes livestock and dairy farming by good thriving towns, improved roads through rural districts, a diversity of crops making vigorous growth showing the presence of rich soil, large, contented herds grazing in luxuriant pastures and representing wealth, splendid, well kept barns and buildings for housing livestock and machinery, good, well-built and well-filled school houses and last, but of greatest importance, on every hand many excellent homes filled with thoughtful and intelligent people.

These people follow livestock farming and dairying because it is the most profitable method of farming, it tends to build rich farms, adequate bank accounts, good homes and contentment.

INTERNATIONAL STOCK FOOD CO., Limited

TORONTO :: CANADA

CATTLE

A BRIEF HISTORY AND STUDY OF BREEDS

THE history of the various breeds of cattle with which we are familiar has been traced back many centuries.

Long before the dawn of recorded history it is reasonable to believe that horned cattle existed in a wild state, and in the Scriptures we read of some as "such as own cattle."

As man gradually advanced from his primitive state and struggled upwards to a higher plane of living he found it necessary to domesticate certain wild animals as beasts of burden and also for bodily sustenance. We learn from ancient writings and pictures that wild cattle were frequently the object of chase by primitive hunters. It is natural to infer that the animals in their adult state were killed for food while the young were reduced to domesticity, and gradually by confinement and care lost their wild instincts.

Ultimately, these captive animals became fully domesticated and as the herds increased, and were driven from place to place in search of fresh fields and new pastures, the people who made them captive became nomadic in character—their flocks and herds furnishing them an abundance of food, and the hides affording not only clothing but shelter for the roving tribes.

The student of racial characteristics and of humanity's upward progress from savagery to civilization finds abundant evidence of the fact

that domestic animals were a most important factor in that advancement.

As civilization progressed, the least desirable breeds were gradually exterminated while only the fittest survived in a state of domestication. Descendants of one of these ancient herds are still to be found in Chillingham Castle, England.

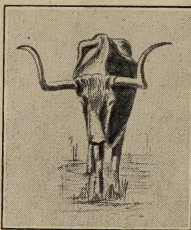
Spaniards, soon after the discovery of America were the first to bring cattle to this continent. Gradually as the herds increased, many of the

cattle escaped and got away from civilization, living in a wild state, and roaming over vast tracts of territory. These wild herds have, as the country became more settled, gradually been brought under the hand of man or have been hunted and killed, domestic cattle eventually taking their place.

The English settlers early introduced cattle into the colonies bringing them from Great Britain. In the early days the cattle in this country were mixtures of various breeds imported by these settlers. As agriculture advanced and the people became more

prosperous, the cattle were improved by better feeding and care.

With experience gained through long years of close study, with strict care and attention given to breeding and feeding, enterprising breeders and progressive stock owners have continued to improve the grade of cattle in this and other countries and have accomplished much towards attaining perfection.



*Type of Original
Spanish Cattle*

A USER THAT WOULD NOT BE WITHOUT IT

Mount Forest, Ont.

Dear Sirs—Last fall I purchased some of your **Cattle Specific**, and I must say it is a good tonic for cattle, and I would not be without it. I found it really better than you recommend it to be. You said it was good but I say it is extra good, and can highly recommend it to anyone raising or keeping stock. (Signed) John Brown.

GREATEST THING FOR DAIRY COWS

Essex, Ont.

Dear Sirs—I want to tell you about your **Cattle Specific**—it is the greatest thing I ever used for my dairy cows. I will never try to winter my cows again without it.

I would like you to ship me some **Grofast Calf Meal** as I cannot get it here, and I know it must be good as all the rest of your preparations are so good. (Signed) Risem Torongeanu

BREEDS OF DAIRY CATTLE

AYRSHIRE CATTLE This breed of Scotch dairy cattle originated under the rugged conditions of Ayrshire, and in their type and general characteristics they exemplify the form and quality of animals required to make the most economical use of food, and do the best under conditions too severe for finer and more delicate cattle.

The Ayrshires are noted for giving large quantities of milk, rich in butter fat. They are gentle and of good constitution. In some families the head is long and narrow, while in others it is short and broad; nose tapers, with clean nostrils. The eye is full and placid; ears fair size and thin; horns of medium size and fine texture with an outward and upward turn. The horns should be far apart. Back should be straight; tail long and set level with back; limbs should be flat-boned and not large. Large, round bones are generally found in poor feeders. The color varies greatly through brown, red and white, and their different combinations.

The milk given by a good Ayrshire cow is about 700 to 800 gallons per year. They are good feeders and fatten profitably. The fat is mingled with the flesh, and this marbled flesh is the butcher's delight. For general utility they unite in quite a large degree good qualities of milk and beef.

HOLSTEIN-FRIESIAN The history of this famous breed dates back for over 2,000 years, and no man can give a definite answer as to their origin. They have been known both in Europe and America by several different

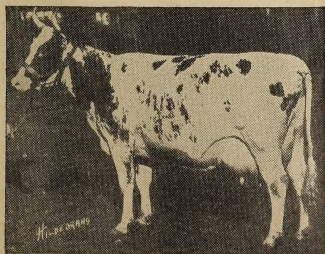
names—"HOLSTEINS," "DUTCH CATTLE," "HOLLAND'S CATTLE," "DUTCH FRIESIANS," "NETHERLAND CATTLE," and "HOLSTEIN-FRIESIANS." These are all of the same breed. Considerable confusion was caused by the many different names, during the early importation of these cattle into America, and to overcome this, breeders and importers decided on calling them "HOLSTEIN-FRIESIANS."

Holsteins were introduced into North America as early as 1625. Very little if any foreign blood was introduced into the development of this breed, improvement being brought about by good care in feeding, management and careful selection.

Cows of this breed will generally average about 1,100 to 1,200 pounds and they possess great capacity for the production of milk. It is principally as a dairy breed that these cattle have become noted in this country. They usually possess good digestive powers, and many stockmen favor them as beef cattle.

The color is generally spotted white and black; neck inclined to be short; head narrow and long; fine horns and projecting ears. They are broad across the hips; legs strong and straight; tail fine and long.

Speaking generally, they are noted for their large flow of milk, not a very few high milk records having been made by members of this breed. During the past few years more attention has been given to weighing the fat content of the milk, with the result that Holstein milk, from the standpoint of quality, is now looked upon more favorably than it was some time ago.



Ayrshire



Holstein

JERSEYS Under this heading can conveniently be grouped, also, cattle known as Alderneys and Guernseys, and description that fits the Jersey will also apply to the other two with the exception that Alderneys are smaller and more delicate than Jerseys and, therefore, not so much in favor. The Guernsey, on the other hand, is a larger breed, are better feeders and better built. They fatten off much more readily and are more valuable when wanting to turn them off for beef. The Guernsey gives a larger quantity of milk than the Jersey, but it is generally admitted that it is not so rich.

Jersey, Guernsey and Alderney are three islands in the British Channel near the coast of France. The cattle on these islands are very carefully guarded and never crossed, and the breeds are known by the names of the islands from which they are imported. They are supposed to be originally from the adjacent French province. Jersey is the largest island and the Jerseys are by far the most noted.

The Jersey has a fine head with the face slightly dished; eye clear, full and mild; the horns are short but curving inward slightly; the ear medium thin and quick in movement. The general appearance of the head is of being well bred. The legs are slender; ribs flat; back is slightly depressed; rump and tail high. In the cow the udder is large and square and covered with soft, silky hair; teats small and fine but standing well apart; milk veins very prominent. The color is generally red or fawn with some black markings. The bone is fine and they generally carry but little flesh. They are noted for their peculiar richness in cream and the fine quality of rich, well flavored butter it produces. They are generally admitted to be the best butter cow in the world, although some other breeds show good milk and butter records.



Jersey

SHORTHORNS Considerable interest has centered around this particular kind of cattle within the past few years. They are a dual-purpose type of cattle, bred for both beef and dairy purposes and are peculiarly adapted for those who do not desire a special purpose breed and more so in those parts of Canada where prevailing conditions do not always make it either profitable or desirable to keep any other breeds.

The ideal requirements of a short-horn are a capacity for a reasonable flow of milk and also the general characteristics of what is expected of the beef breeds.

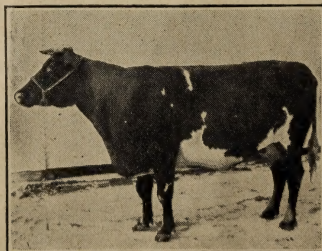
The Shorthorns are natives of England and Scotland, where they are still raised in large numbers. At the present time they are also extensively bred in America. They are red, white or roan in color, or may be spotted red and white. They are low down and blocky, with a good coating of flesh of good quality, and are one of the most popular breeds of beef cattle; good grade steers often being finished at 2,000 to 2,400 pounds.

OTHER DAIRY BREEDS Besides the breeds described, there are others but as these are not found to any large extent in Canada it is not necessary to describe them. Some of these, however, are: "DEVON CATTLE," "DUTCH BELTED CATTLE," "RED-POLLED CATTLE," "SWISS CATTLE," etc., etc.

THE BEST EVER

Madoc, Ont.

Dear Sirs—We find **International Cattle Specific** the best we have ever tried and would like to get prices on your **Calf Meal**. Yours truly,
(Signed) A. H. Forestell



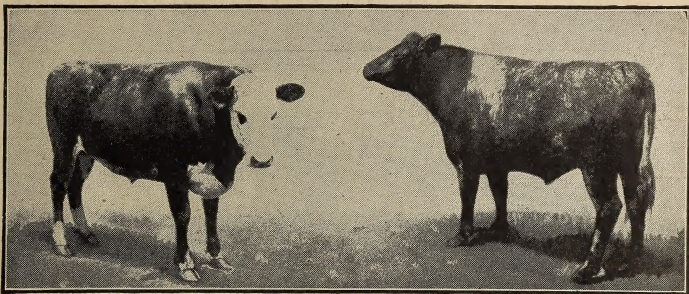
Shorthorn

SELECTING A BEEF HERD

THE selecting of a breed is largely a matter of personal preference. If you like a certain breed you will succeed with them. Start right and build up a herd of winners and you can establish a profitable business for life—one that you can hand down to your children as a monument of your sagacity.

For the farmer who raises a few market cattle every year but does not care to breed blue-ribbon winners, the keystone of herd improvement is in swatting the scrub bull and using a pure-bred sire of quality. The bull is more than half the herd, for with good judgment in mating and culling, all his progeny will "take after father" in a few generations. The pure-bred makes better gains for the amount of feed consumed because it has been developed along special lines, and specialization is the basis of profit in every industry.

In building up a herd for beef production, select



Good Type of Steers.

cows with a deep, broad and square body, cows with a good coating of flesh, for these if bred to the right kind of bull, will produce calves that will prove profitable feeders.

Now for the bull. Remember that the sire you use stamps his qualities not on just one calf but on every calf that you raise from him. For this reason buy a registered bull of the breed you want, even if you only have grade cows, and then you are sure of getting a beef breed from beef ancestors. Select a bull that is of good size, with a broad masculine bearing, a good intelligent head, broad and full between the eyes, a short face and

strong, clear eyes, yet with a quiet expression, as a nervous excitable animal will never fatten to good advantage.

The bull should be broad and straight across the back, with smooth, even hips. He should have well sprung ribs, heavily covered with flesh. If your herd is not large enough to justify the purchase of a pure-bred bull, then obtain the services of the very best bull in your neighborhood.

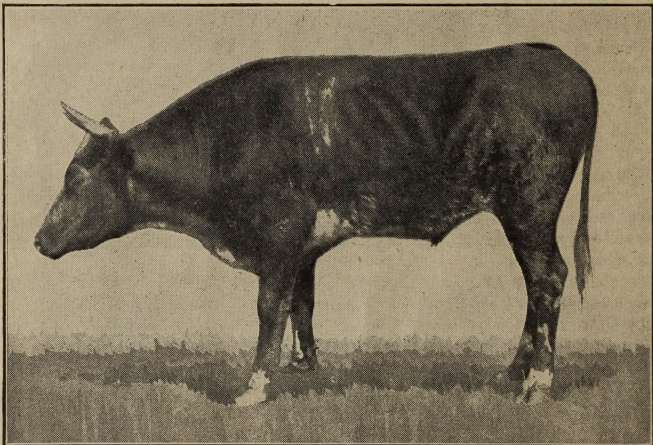


Prime Rib from Good Steer.

BUYING STOCKERS AND FEEDERS

IT is doubtful if the shipping of mongrel stock, ever did pay the man who bred and fed them, it is quite certain that it does not pay nowadays. Success in any line rests upon the ability to compete, and the grower of scrubs cannot compete with the man who produces the good ones.

As the corner stone of success lies in that element we call "class," the problem of the stockman is one of buying or raising feeders of quality. There are men who



An Inferior Steer



Prime Rib from an Inferior Steer

can pick a good stocker at sight—one that will grow rapidly and with economy of feed. This art comes from study and practice.

The ideal beef animal is what is called "blocky"; it has a straight back, full loin, short legs, deep chest, well sprung ribs and a smooth coat of hair covering a loose skin.

The beef type is pronounced in such breeds as the Hereford, Angus, Shorthorn and Galloway; families that have been bred for generations with an eye to the economical conversion of feed into four-legged sirloins.

SELECTING A DAIRY HERD

IN buying dairy cattle we have a different standard to go by than in selecting a beef animal.

A dairy cow is a machine that turns feed into milk and cream. So we must look for one that will convert the greatest quantity of feed into the most milk and cream. The type of dairy cow wanted is one weighing around 1,000 pounds. She must have a lean neck and head. Her eye should be clear and large, indicating health and temperament. Her body should be narrow over the shoulders, and broad at the hip and rump. She should have a large chest indicating vitality. Her pouch or belly should be large, showing that she is able to consume a large amount of rough food. She should have a set of large, branching milk veins leading to a well developed udder on which are placed four good sized teats. She should carry very little flesh.

MAKES CATTLE FEEL AND LOOK BETTER

Marmion, Ont.

Dear Sir—We found your **International Cattle Specific** all right in making cattle feel and look better; also making a better flow of milk from our milch cows. We are satisfied with it.
(Signed) Lorenzo Tyler

HIS COWS MILKED BETTER THAN EVER

Rawcliffe, Que.

Dear Sirs—I am well pleased with your **International Cattle Specific**. I found it did my cattle good; they milked better and are fatter than I ever saw them. I am well satisfied. Thanking you very much.
(Signed) Patrick Stone



A Herd and Equipment any Owner would be proud of.

IS OBTAINING EXCELLENT RESULTS

Collingwood, Ont.

Dear Sirs—Have been feeding your **Cattle Specific** for the past winter, and have had excellent results both in condition of cattle and at calving time, also have had no trouble with young calves after birth.
(Signed) Franklin Griesback

EXCELLENT FOR CARRYING STOCK OVER WINTER

Richmond, Ont.

Dear Sir—I appreciate the **Cattle Specific** which I purchased from you very much, as it was a great assistance in carrying the stock over the winter.
(Signed) Earl Whitelaw

BREEDING

IN-BREEDING and line-breeding are not recommended for the novice, nor is it a safe practice for the average breeder. Grading is the most economical method of improving live stock, and is the method in most general use. Grading means the mating of common or unimproved animals with one that is highly improved—a pure bred. This is usually done by using a pure-bred male, for in this way one animal's influence is distributed throughout the entire herd.

THE DAIRY BULL When you want to economize go without anything else, but do not economize at the expense of your dairy bull, buy the best animal you possibly can and for the largest sum you can appropriate. A good bull, well bred with a record in the family especially on the mother's side for milk pail performance will grade up your herd in short order, even if very ordinary to start with. If he gets good daughters keep him, as long as he is serviceable. Do not sell a good bull simply to get new blood. Keep him right up in condition, with not too much fattening feed, but a good ration of roots, wheat bran, gluten meal, oil meal, silage and clover hay. Keep him well exercised. Keep him fit and in condition.

If you want to get the most out of the sire of your breeding herd you must keep him in condition, you must keep his blood pure, the various organs in his body functioning normally, there is no better way than giving him daily in his rations a tablespoonful of International Cattle Specific morning and night. Besides keeping him healthy it will help him towards giving perfect performance in breeding.

THE HEIFER It is not good practice to breed a dairy heifer until she is at least twenty months old. Breeding her before this time may tend to stunt her in her growth and, as a result, she will always remain a small cow. If she is extra large, she may be safely bred to calve shortly after she is two years old. During the period the heifer is carrying her calf she requires careful handling in order that she will make as little trouble as possible when first commencing to milk. Kind treatment at this time will be well repaid during her future milking life.

During the time the heifer is carrying her calf

she should be fed extra well, she is still immature and growing and you can't afford to check her development for that of her first calf.

Gentle manipulation of the udder at regular times will tend to increase its development, hence future capacity. Then when the calf comes be sure to turn the young heifer over to the best, most rapid, most skilful milker, as the manner of milking will increase the milk supply. Do not breed her again until six months after her first calving. Try to keep up her milk flow, by skilful management in milking and care and water and feed; for you must establish now the milk habit. She should keep up a good flow up to two months of the time of her next calving; and if her butter record for the whole time is something between 20 and 250 pounds you can call it satisfactory. If less than that, she is no good for your dairy. Also, if she goes dry before the limit set in the first test, don't waste time with her. After the second calving the young heifer can be bred immediately, as is the custom with most dairymen.

With mature cows the best results are obtained by requiring them to freshen each year, permitting each cow to go dry for six weeks to two months each year. Of course, there are instances of cows keeping up a good flow for two or even three years without calving, yet this is hardly a profitable plan.

When we consider that the average cow is not only giving her daily output of milk but is, at the same time, carrying a calf, consideration must be given that she is properly fed, to care for the demands made on her system. The greater the care expended during this period in her feeding, comfort and cleanliness, the greater will be the results at calving time. Such things as the mineral requirements of her system may not appeal to many, still, if this phase of breeding and care were better understood and practiced there would not be one quarter of the regrettable and, yet controllable occurrences that happen, such as premature birth, (Abortion), birth of weak, puny calves, afterbirth trouble, etc. It is within the province of every dairyman to reduce his losses to a marked degree through furnishing the cow's system with an adequate supply of the vital and necessary minerals required

Continued on page 10

HOLSTEINS ON SPRUCE GROVE FARM



SUCCESS has come to Mr. Geo. C. MacIntosh, of R.R. No. 1, Science Hill, Ont., only through his determined efforts, with which he has combined an ability to look ahead and produce what he wanted.

The lower picture shows part only of his Holstein herd and gives some idea of how excellently

he has worked towards obtaining his object.

This splendid herd has at its head Calamity Hartog King, sired by Pioneer Count Calamity Hartog, this sire sold for eight hundred dollars when only three months old. The two cows in the picture are Pieterdje Beauty Posch, and Princess Ormsby Posch. Both these cows are from out-standing parents, the sire of one being Duke Beauty Pieterdje and the sire of the other, Francy King Ormsby.

With parentage of this description it is easy to understand how Mr. MacIntosh has built up such an excellent reputation for the herd, and also for himself, as a cattle breeder and feeder.

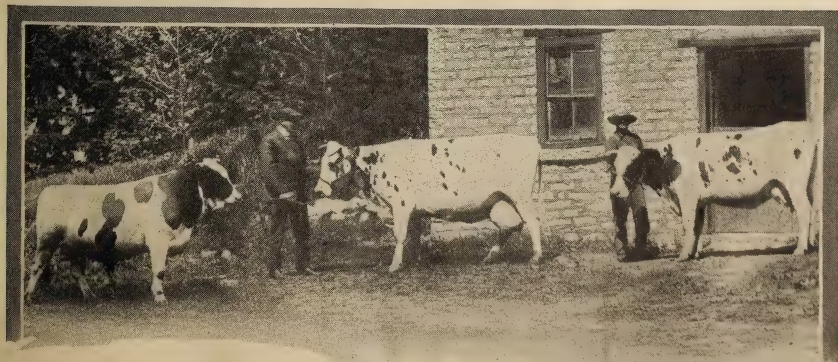
It is interesting to note how highly Mr. MacIntosh esteems International Preparations. He has been using considerable quantities during the past eight years and states: "I have found that the constant use of International Cattle Specific day-by-day according to your directions produces splendid results. I never have any trouble with indigestion or similar cattle ailments, and instead, my cows are always healthy, thrifty, and producing



splendidly. I am more than satisfied with the use of your Specific. It has a decidedly good influence on the milk yield through the increased appetite and good digestion it gives my cattle. I would not be without your Cattle Specific under any consideration.

"I can speak just as highly of your Grofast Calf Meal. I raise all my calves on this feed, and find that they grow strong and healthy with a tremendous saving in cost. I can heartily recommend the use of your preparations to any one desirous of making the most out of their stock. One thing I have found and that is to obtain the very best results, your specifics must be used every day, and not just for a few days, but continuously."

Mr. MacIntosh is one of our many satisfied customers, and it certainly speaks well for International preparations when so progressive a stock man says what he does.



BREEDING—*Continued*

for both her own maintenance and for the formation of the calf.

The simplest and surest way of furnishing all the necessary minerals is through the use of International Cattle Specific. Morning and evening this specific should be used with the same regularity that feed is given. Not for a day or two, or a week or two, but its use should be continued with consistency throughout the year. It helps to put back into the system what is being daily extracted.

For instance, a dairy cow producing 8,000 pounds of milk a year furnishes fifty-six pounds of mineral matter, or 19% more than the minerals in the entire body of a two year old fat steer weighing 1,200 pounds. It stand to reason, then, that if cows are to thrive and produce they must be furnished with mineral matter. It is a well known fact that many of the feeds that are used to-day are sadly deficient in minerals, and where stock is fed for any length of time on feeds that are low in mineral matter they eventually show signs of break down, which may not be serious in the commencement, but, as time goes on, and the depletion continues, poor health, loss in weight and a generally exhausted condition, occurs.

Nature demands certain minerals and, if these are not furnished, then immediately there is a drain on the system and the mineral matter is extracted from the bones, resulting in their becoming porous and brittle. How often have you noticed, especially in the spring when the cattle are turned out, after being confined all winter, how they look for old bones to chew, or even some will be seen eating the fence rails and licking the lime between the bricks around the buildings. Why is this? They have been deprived of certain vital elements; it has been lacking in the feed; they have not been able to obtain it elsewhere and, at the first opportunity that offered, they have tried to make up the deficiency by eating bones or any other object that might help to stop the craving in their systems and make up the deficiency.

We occasionally hear a cattle man say, "Oh, my cows don't need anything; they are in good health, are never sick or sorry," and continues to say that he does not believe in stimulating his cattle with dope, etc. We heartily agree with him, we do not advocate the use of dope or stimulants in any form for live stock, they do not need it. An animal that requires doping should be disposed of at the first opportunity, it is a non-producer and

an expense. There are, however, certain things that every thinking cattle raiser should know and practice, and this applies to the man that is raising only beef cattle as well as the man who has milch cows.

Production depends on the capacity of any animal to properly digest its food, and large quantities of food at that, the greater the quantity eaten, properly digested and assimilated, naturally, the greater the production. There is a limit to which any stock can be fed. Ordinarily, that is, when appetite is satisfied food consumption stops. It is just beyond this point that the profits lie and, it is by getting stock to eat that extra amount, without upsetting digestion, that spells greater production.

All live stock, and this applies every bit as well to the carefully bred modern dairy cow, will, when they can get it, eat certain leaves, herbs, etc., that nature has provided. They need this medication of bitters, of various aromatics, to keep them in condition, to keep their digestive organs toned and their bowels functioning normally. International Cattle Specific is made along nature's lines; it contains simple roots, herbs, barks, minerals, etc., that cattle must and will have in one way or the other if they are to remain healthy and productive and, by using International, you are aiding nature—NOT DOPING, but furnishing body requirements that very often are lacking in the feed.

Throughout this book we have published letters received from Dairymen and Cattle Owners in many parts of the country. Many of these men own registered herds, some are large cattle owners and some only have a few head, still, each letter tells a story, tells of the satisfaction that has been obtained as a result of using International Cattle Specific, how cows have cleaned better; how the milk yield has been increased; how cattle have been kept healthy, thrifty and producing. We earnestly suggest that you read every one of these letters, they offer convincing proof as to the merits of International.

NOTICES A MARKED INCREASE IN MILK YIELD

Streetsville, Ont.

Dear Sir—I have used your **International Cattle Specific** for milch cows, and am highly pleased with the results. My cows show a marked increase in the amount of milk, and are in better condition. I now wish to order a further supply.

(Signed) John Wylie

THE CALF AND CALVING

THE required time of gestation or the period in which a cow carries her calf, is usually 280 to 285 days. Shortly prior to calving special attention should be given the cow. Place her in a loose box-stall with plenty of bedding; give her feed of a laxative nature; the drinking water should have the chill taken from it, and her bowels should be kept in a natural condition by giving her International Cattle Specific.

After the labor pains have appeared, it would be well to keep watch of her, and if she does not deliver her calf within a reasonable length of time—say, one hour—it would be advisable to make an examination. Upon doing so, if the calf be in a natural position, the nose and front feet are the first to be felt. If such be the case, the attendant may assist the cow in delivering her calf by pulling on the front feet. Any other position would indicate an unnatural condition of calving. When the calf is born the naval cord should be tied two inches from the body with a string soaked in some good disinfectant, Tarx disinfectant answers excellently for the purpose; the naval cord should then be cut about four inches from the body. Tarx should be applied two or three times daily to the cord until it dries up and falls off. This will prevent the calf from becoming infected with naval disease. The calf should then be allowed to remain with the cow for three or four days.

Just what kind of a calf has been born will depend on several factors, the most important being the sire, and according to him so will his get be either good, bad or indifferent. The health of the mother, the care you have given her, her feed and comfort also play an important part in deciding whether you have a strong, husky youngster, or a puny weakling. It is surprising what a vast deal of good the steady day by day use of International Cattle Specific does towards producing a healthy, red blooded calf. If you have never used it give it a trial, note the difference when calving time comes around.

The growth of the calf during the first year will depend much on the start the calf gets during the first month. This, possibly, is the most important period in its whole life and extra care should be exercised then to see that it is not given any set-backs. For the first three or four days allow it to have its mother's milk, it will get a better start if allowed to suck at will, while the udder of the

cow will be benefitted, and it is not a serious matter to teach a three or four day old calf to drink from a pail. The old fashioned method of using the fingers to teach a calf to drink from a pail has never been improved on.

The fresh milk of the newly-calved cow should always be given to the calf as it contains that product, colostrum, that is necessary to stimulate the newly-born calf's digestive system into action. At the least, the calf should have fresh milk till two weeks old, five to six quarts per day being sufficient, given in two or three equal feedings.

For those who have a market for their milk and yet must raise their own calves, it becomes necessary to use some form of whole milk substitute, which can be fed either mixed with water alone, or if available, with skim milk. Too much care cannot be exercised as to what is used at this period as a substitute. It must be remembered that the calf requires a food that is actually a substitute for whole milk, that contains in their right proportions Protein, Fat and Carbohydrates, just merely feeding feed, will not do—the result will be indigestion and scours, set-backs and loss.

International Grofast Calf Meal offers a ready solution to calf feeding problems, as it can be used from the time a calf is three or four days old until eight to ten months of age. Grofast is a scientifically prepared whole milk substitute made from the very highest quality feeding materials procurable, it combines in their proper proportions Protein, Fat, etc., and is in every respect the ideal dependable substitute for feeding to calves. Complete directions for feeding "Grofast" accompany each bag, it is simple to use, no cooking required and, further, calves like and relish it. (See description and particulars of Grofast Calf Meal at end of book).

In feeding calves it is essential that all feed be given warm, at a temperature of 98 degrees, blood heat, also all pails used for feeding purposes should be scalded periodically and kept sweet and clean.

Around three weeks of age the calf will start to nibble at a little hay, a little alfalfa or clover should be kept within its reach at all times till it is three months old.

Notwithstanding the fact that the calf is fed on milk, or a little later, warm water with its gruel, it becomes thirsty and should have access to abundant quantities of fresh, clean water. Salt

Continued on page 13

THE PRESTON HERD AT NORWOOD, ONT.

IT stands to reason that if a man is to be well known throughout his own and neighboring counties he must be able to do something and do that something well. He must know what he is doing and why he is doing it—for success never comes to anyone who follows haphazard methods; lacks a definite goal, and follows at random, ideas that are not basically sound.

In live stock raising, an aptitude for close observation, a knowledge of cause and effect, and, an ability to learn from past experience is essential. How to feed and what to feed, so that maximum growth and production may be obtained in the shortest possible time and at the least possible cost, distinguishes between the successful and unsuccessful stock man.

In Mr. Wm. Preston, of R.R. No. 2, Norwood, Ont., we have a farmer and stock owner who has demonstrated conclusively that it does not need great wealth or the possession of costly equipment to build up a reliable and financially successful dairy herd. It does, however, require patience, determination and constant striving coupled with a knowledge of breeding, feeding and care; this knowledge is available to every stock man if he will but avail himself of it.

Mr. Preston enjoys an enviable reputation as a successful stock man throughout the County of Peterboro and adjoining counties, his barns are constantly visited by neighbors and others who are desirous of learning how he feeds, etc. Mr. Preston is an enthusiastic user of International Preparations—he finds that they not only help him to obtain more milk from his cows, but that their use is a sound business policy, enabling him to make more money from his herd. Here is what this well known stock man has to say:

"For several years past I have been using large quantities of your preparations; chiefly your Cattle Specific and Grofast Calf Meal; both these preparations have given me splendid results.



"I have found that the daily use of your Cattle Specific during the winter months enables me to have my cows in the very best condition throughout the Spring and Summer, and I am

satisfied that the use of this Specific results in my Cattle producing a larger quantity of milk during this period, and at a time when other people's cows are beginning to go-off in their milk yield.

"Grofast Calf Meal is also an excellent feed for raising young calves on, I have had splendid results since I commenced using it and never have any trouble with my calves; they keep growing steadily from the commencement.

"You certainly can depend upon my recommending your preparations to my friends and neighbors."

USES INTERNATIONAL PREPARATIONS WITH ENTIRE SATISFACTION

Petrolia, Ont.

Dear Sirs:—I have used your Stock Specifics for several years on my stock with entire satisfaction. I find my cows milk better and my calves thrive and mature much younger. With regard to your celebrated **Grofast Calf Meal**, I have used it with splendid success, our calves are all as good as though left run with their mothers.

Yours truly, (Signed) Cecil R. Salts.



also is important to the development of the calf as it is to other animals, and it should be kept constantly within reach.

Many farmers and dairymen always use International Cattle Specific in raising their calves which they add to the Grofast Calf Meal gruel with highly beneficial results. Containing as it does valuable minerals, tonics, etc., it helps remarkably the growth and well being of the little ones.

At feeding time, hand reared calves should be confined in stanchions to remain for a time after the milk has been drunk so as to overcome the desire to suck each others' ears or udders. When this precaution is neglected, the shape of the udder may be injured, or a heifer may later persist in sucking herself or others.

Properly fed on Grofast Calf Meal with suitable grains and roughage later, the thrifty calf should make gains of two pounds or more per day for the first 4-6 months. The aim should not be to fatten the calf, but to keep it in a vigorous, growing condition, building strong bone and muscle. When hand fed calves do poorly the cause of the trouble will, ordinarily, be found in some one or more of the following conditions: Lack of sunlight and fresh air; unsanitary stalls or boxes that are not properly cleaned and disinfected; feeding too much, or at irregular intervals; feeding stale or chilled food; feeding from pails that have not been scalded daily; feeding improper concentrates or allowing the excess to ferment and stale in the feed box.

Pasture is excellent for calves old enough to make good use of it. To avoid scours they should be turned on grass gradually, say for an hour the first day and for slowly lengthening periods thereafter. It is well to keep spring or summer calves in their stalls until they are two to four months old, as there is less trouble from scours, and also they will not suffer as much from flies and the heat.

The rearing of the heifer after six to eight months is an easy task, and perhaps of this many are stunted for lack of suitable feed. Since the usefulness of the cow when mature is dependent on her proper development before the first calf is dropped, it is important to heed the few essentials in feeding and caring for the heifer.

Heifers on a good pasture usually require no additional feed. In winter there is no better ration than legume hay, silage, and sufficient grain to keep them thrifty and growing without becoming fat. The feed should supply an abundance of Protein and mineral matter. Adding the recom-

mended amount of International Cattle Specific to her feed twice daily will remove all doubt as to her mineral requirements as she will thus obtain in a concentrated form just what her system needs for proper growth.

The same principles apply to the rearing of the bull calf as to the heifer. The bull should be fed from birth to maturity so as to make normal growth. From six months of age, when the bull calves should be separated from the heifers, they should be fed a somewhat heavier allowance of grain. The bull should be sufficiently mature for very light service at ten to twelve months of age. He should be halter broken as a calf, and when about one year old should have a stout ring inserted in his nose. He should be so handled from calfhood that he will recognize man as his master and should never be given an opportunity to learn his great strength. Stalls and fences should always be so strongly built that there is no possibility of his learning to break loose.

The ration for a bull in full service should be about the same as for a dairy cow in milk. He should be given good legume hay or hay from mixed legumes and grasses and fed from four to eight pounds of concentrates, supplying an ample amount of protein. When idle or but in partial service, less concentrates will be required. The bull should also be given twice a day with his rations, International Cattle Specific. It helps to keep him fit and in condition, it keeps his blood pure, his liver and kidneys functioning normally and also supplies the minerals necessary to keep up his stamina and energy. A bull that is regularly given International Cattle Specific will prove his usefulness at breeding time.

It is well to have the bull's stall so located that he can see the other members of the herd. He should be tied by a strong halter to one end of the manger and by his ring to the other end, so that the attendant may approach him from either side without danger. The bull should be dehorned, and should always be handled with a strong, safe staff. Even with a quiet, peaceable bull, safety lies only in handling him without displaying fear and yet as if he were watching for an opportunity to gore his attendant. Nearly all the accidents occur with "quiet" bulls that have been too much trusted. As the bull spends most of his time in the stall, his hoofs should be trimmed at regular periods.

Exercise for the bull is essential to maintain his health and virility, and whatever plan is adopted, he should receive ample and regular exercise, else he is almost certain to develop an ugly disposition, and may also become impotent.

FEEDING

THE feeding of cattle either for dairy or beef purposes, involves the supplying in the proper proportions of certain feeding elements that must be supplied if the best results are to be obtained.

We cannot over-emphasize the importance of supplying these food elements in the proportions that exhaustive experiments have proven are proper for beef production and for the use of the dairy cow.

The element that we find is most neglected, is the protein of the food that goes to the building up of the bones, blood, nerves and muscles. This is the principal food element in bran, oats, clover, alfalfa, peas, beans, oil meal, cotton seed meal, etc., and must be supplied to the young animal if it is to make a rapid growth. In connection with this highly important element, some of the fattening feeds such as corn, barley, etc., should be used to strike a balance.

Bulk is an important factor, as on it depends largely the proper digestion of the food, so that some of these elements should be given, such as hays, silage, roots, etc.

The problem of working out a balanced ration is somewhat complicated and takes into consideration fine points that may be looked to by the man who makes the care of live stock his entire business and who has all the help he needs, but for the general farmer who must care for his stock after a full day's work has already been done, they cannot all be taken into consideration.

We, therefore, give some rations for dairy cattle feeding that have given good results in various sections of the country. Among them you can, no doubt, find one that you can easily prepare that will give you a "balance" that will enable you to realize bigger returns on your investment in feed stuffs.

DAIRY RATIONS

The dairy cow is a big feeder and should have all of a good balanced ration she will eat without waste. She must have lots of protein that can be supplied much cheaper by the use of alfalfa, clover, cow peas, or vetches than by the use of expensive concentrates.

Supply hay of one of these plants, one of which at least can be grown in every section of Canada, and have a mixed pasture containing one of these legumes, alsike, white clover, sweet clover, crim-

son clover or winter vetch. Use silage or roots if you have them. Silage always helps with any of these rations, and less grain per cow is necessary when it is used.

Select a ration from this list according to the locality in which you are located, and remember: to get the very best results, to have the feed properly digested and assimilated add International Cattle Specific twice a day to each cow's rations.

Like the human being, the cow likes and will respond to variety in feeds; that is, she likes a number of different kinds of feeds rather than too much of one feed, no matter how perfect that may be for the purpose, from its composition. Variety does not mean changing the feed from one day to another. It means that in a whole day's rations, a cow should have some succulent feed (mangels or silage) some dry fodder (hay and straw) and a mixture of two or more kinds of concentrates. Such variety will give cheaper and better returns than too much of any one kind of feed, even the best alfalfa or clover hay.

- Ration No. 1.—600 lbs. Barley, 400 lbs. Bran, 100 lbs. Oil Meal, and roughage of Alfalfa or clover hay, or pasture.
- Ration No. 2.—300 lbs. Barley, 300 lbs. Bran, 100 lbs. Oil Meal, and roughage of clover or Alfalfa hay or pasture.
- Ration No. 3.—500 lbs. Corn Chop, 40 lbs. Bran, 100 lbs. Oil Meal and roughage of clover hay, Alfalfa hay or Silage.
- Ration No. 4.—400 lbs. Corn Chop, 100 lbs. Cottonseed Meal, 200 lbs. Bran and roughage of clover, Alfalfa, or cow pea hay.

IS DELIGHTED WITH RESULTS

Sayabec, Que.

Dear Sirs—I have used your **Grofast Calf Meal** last spring, and have found it very satisfactory. It has made the calves ready for the sale to butchers. I am very delighted with the results and can recommend it to everybody.

(Signed) Francois Berube

CALVES NEVER DID BETTER

Fenelon Falls, Ont.

Dear Sirs—I have fed your **Grofast Calf Meal** and found it good. My calves never did better.

(Signed) Howard Arscott

A JERSEY HERD TO BE PROUD OF



ONE of the finest herds of Jersey cattle in the province is owned by Mr. F. W. Johnston, whose farm is located at Foster, in the county of Shefford, Quebec.

Mr. Johnston is a recognized breeder of pure bred cattle, and he is noted as one of the best breeders and feeders in the Eastern Townships; in fact, his fame and reputation is so extensive that farmers visit him from miles around to see his herd and obtain pointers from him.

His herd is a fully accredited, registered, pure-bred Jersey herd, consisting of about twenty cows, and is sired by what is considered one of the best-bred Jersey bulls in the province of Quebec. The



grand-sire of this bull was sold recently at public auction for sixty-five thousand dollars.

Mr. Johnston is a progressive breeder, he is up-to-date in his methods, and realizes to obtain the most from his cattle that they must be kept in the best of health. For this reason he is a firm believer in the use of International Cattle Specific. Mr. Johnston has this to say about "International"—

"I have been a user of your cattle specific for the past eighteen years, and find that by using it, I can get much better results from my stock. I feed a lot of it, and must say that it certainly pays any farmer to give his cattle International Cattle Specific every night and morning, along with their regular feed."



"INTERNATIONAL" ENABLES HIM TO MAKE MONEY

Cornwall, Ont.

Gentlemen—I bought your **International Cattle Specific** last September as a trial order, and must say that I found it satisfactory. I consider my ten cows have made me \$100.00 or over, more than they would have if I hadn't fed the Specific.

(Signed) Phelix Watters.

SAVES FIVE TIMES THE COST

Mitchell, Ont.

Dear Sirs—I have fed International Specifics the last five years, and in buying your goods direct from the factory, I must say that I have saved five times in the feed the cost of the tonic. The Specific for cows is a wonder; getting ten per cent. more milk and keeps them nice and smooth in hair.

(Signed) John Pushelberg

GENERAL CARE OF THE MILKING HERD IN SUMMER AND WINTER

WATER IN SUMMER A plentiful supply of clean fresh water is an absolute necessity in getting good results from the herd in summer. If a creek or spring is not available in the pasture, the herd will have to be supplied from a well. Where it is necessary to water near the barn the cows should be allowed to drink their fill twice a day at the very least, and in hot weather three times if it is at all practicable to get them to the water.

SALT While on green pasture cows will consume a great quantity of salt. This is best fed by putting a small handful in the manger once a day while the cows are inside. If the pasture is close to the building where it can be renewed often, an old trough will do nicely for salting, and the cows can help themselves at will.

SHADE In summer, a shade is almost an absolute necessity. The cow becomes heated from pasturing in the open and is pestered to more or less extent by the flies. When she wishes to rest and chew her cud she should have a comfortable place to do so, where she can cool off and where flies will not bother her much. She will show her appreciation of this comfort by a good response at the pail. Pasture should always, therefore, be arranged with a view of providing shade.

Every dairyman knows that it is in the late spring or early summer, while on luxuriant pasture, that the dairy herd normally reaches the maximum production for the year. This fact teaches that to secure the largest total yield of milk, the dairyman should imitate these summer conditions as closely as possible during the other months of the year. The summer conditions which bring about the maximum production of milk and butter fat are:

An abundance of feed; a balanced ration; succulent feed; palatable feed; a moderate temperature; comfortable surroundings and reasonable exercise. Upon the ability of the dairyman to maintain these favorable conditions for his herd throughout the year, depend in a large measure the profits he will receive.

Leaving the cows out in the cold and rainy weather, especially at night is not profitable, yet many dairymen, wishing to make the most of

the pasture which is usually plentiful in the fall do this and run the risk of causing a serious shrinkage in the milk flow.

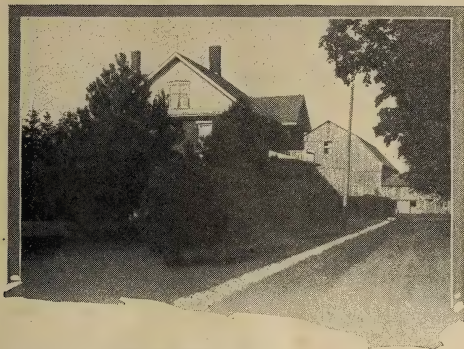
When the nights become frosty and cold, it is advisable to keep the milking cows in the stable all night. Even if feed is plentiful in the pasture the cold nights cause a shrinkage in the milk flow that can in this way be avoided. While the herd is being stabled at night and pastured by day, it is difficult to keep the animals clean. To avoid this as much as possible, some bedding is necessary. In addition, cows should be fed, milked, and turned out as early as possible in the morning, because it is when they lie down the second time that they become badly fouled.

As cows that have been milked well throughout the summer are never in very high condition in the fall, liberal feeding is required at this time to maintain at normal the milk flow, and also to provide the food necessary to improve the bodily condition and enable the animal to accumulate as large a store of body fat as possible to tide them over the changed conditions of winter, and often a shortage of food. It is highly profitable to feed well at this period for unless the cow is in good condition she will not milk well, and besides, when she reaches good condition it does not cost as much to keep her for the balance of the winter as it would do if she were low in flesh.

Feed well for the first two months of the stabling period and, if it becomes necessary, through shortage of feed, etc., to cut down, the herd of all ages will then be better able to stand the reduction towards spring. Feed good hay in the fall and early winter, and when the herd is in good condition they will eat straw and poorer hay with more relish and therefore, with better results. If you do not practice using International Cattle Specific throughout the year like many dairymen do, it becomes necessary that you feed it to your cattle from the time they are first put in their quarters for the winter. You will find that it helps remarkably to keep up the milk supply, and not only this, it adds a relish to the feed. The results of thousands of tests made by users in every part of Canada prove conclusively that wherever this specific is used, cattle winter better, and spring finds them looking sleek, well fleshed and thrifty.

Regularity in feeding, milking, etc., is an important factor and should be carefully observed, as the dairy cow reacts very quickly to any sudden change. Often a sudden decrease in the milk flow for two or three days may result from a change in the time of feeding, or milking and care. For successful stable management, there should be a regularity in feeding, tending and milking operations. The best of herds, even when fed an abundance of the right kind of food, will not produce profitably without regular care and attendance.

WHAT A NORWICH FARMER IS DOING



MR. CLINTON E. HANMER, of R.R. No. 3, Norwich, Ontario, when asked what he considered the most important factor necessary to insure success in raising cattle stated: "The best available sire and good feeding."

Mr. Hanmer believes in practicing what he preaches, as his herd well goes to prove. His yearling herd sire is a prize one; having won at both the Royal Fall Fair, Toronto, and at Guelph.

In the picture below are shown two of his best cows, Princess Pontiac Schuiling, a five year old, that averages 70 pounds of milk daily, testing 3.3 per cent. butter fat. The light colored cow is Tidy Faforit Mercena, a four year old, averaging 65 pounds of milk daily, testing 3.4 per cent. butter

fat. Mr. Hanmer's herd consists of pure-bred Holsteins, the only kind he has any use for. Besides cattle Mr. Hanmer goes in for raising hogs, and poultry.

This successful cattle breeder and dairyman, who has used quantities of International Cattle Specific, has this to say about its merits: "I like to feed it before freshening as it helps to carry the cows through calving and starts them on the way well. I have never had a cow off feed while being fed this Specific as it keeps them in first-class condition, thrifty and with good appetites and digestion."

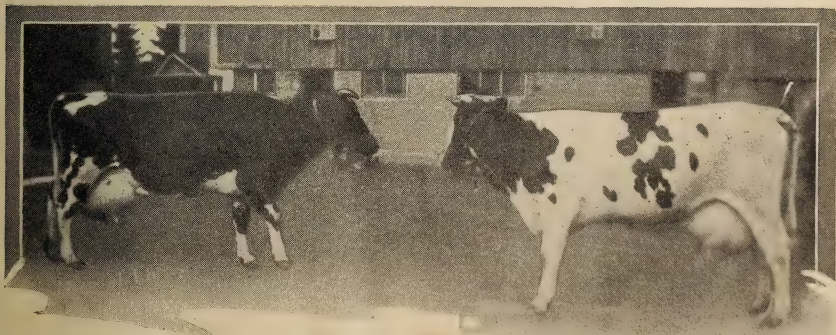
Mr. Hanmer is one of our successful Old Ontario cattle breeders, and is a man who knows his business well, thoroughly understands breeding, feeding, and live stock care. His testimony regarding the merits of International Cattle Specific should certainly carry weight with those who have never used this preparation before. Men of his type never make statements of this kind unless they have proved to their own entire satisfaction that these goods do all and more than we claim for them.

OBTAINS SPLENDID RESULTS

Hennigar, N.S.

Dear Sir—I may also add that the Stock Specifics were fine and I certainly have had splendid results.

(Signed) Newburn H. Miller



SYMPTOMS AND TREATMENT OF CATTLE DISEASES

FREE VETERINARY ADVICE

Though we describe many cattle diseases and suggest treatment for them; frequently sickness occurs amongst stock that is hard to diagnose. Often some simple remedy will correct the trouble if it is known what should be done.

We maintain a Veterinary Department in charge of our own Veterinarian, a capable and well informed practitioner who has had more than twenty years' experience in treating all branches of live stock. His advice is freely furnished to anyone of our customers who desire to avail themselves of this service and is absolutely free of charge.

We have been doing this for several years and have written many thousands of letters to people in different parts of Canada, giving advice and suggesting treatment for various live stock ills. Needless to say, this service is appreciated, for we have received many letters thanking us for our help.

Should you at any time be confronted with a case of sickness or disease amongst your live stock, we will be only too pleased to hear from you. You can depend on receiving good, sound, practical advice. All you have to do is to write, giving full particulars as to the symptoms and general condition regarding your sick or ailing stock—horses, hogs, cattle, poultry, etc. Address your letter to the Veterinary Surgeon, c/o International Stock Food Company, Limited, Toronto, Canada.

ABORTION

Abortion has two distinct, though related, meanings. The word is used to designate the act of prematurely expelling the foetus or, in common language, "slinking the calf." While this is the first and most common application of the term, the second, and by far the most important designation, is that of the disease which is the cause of, perhaps, ninety per cent. of "Calf Slinking."

Before it was understood or accepted that abortion is a disease, the act of abortion was attributed to numberless causes and conditions. Some laid the trouble to loosening feeds, such as flax seed meal and millet hay that was overripe when cut. Others were sure that the smell of fresh blood at butchering time would cause the cow to lose her calf. The most common theory, and the one still

widely accepted, even by those who recognize abortion as a disease, is that the malady is caused by ergot or smut on grasses, corn and other grains.

Investigators have, however, proved that abortion, outside of accidental abortion, is really caused by the disease of contagious abortion, the germs of which are in the system of the animal, working upon and weakening the genital organs and interfering with the functions of reproduction and gestation, and that feed or excitement only hasten the act.

SYMPTOMS OF CONTAGIOUS ABORTION

Abortion germs may exist for months or even years, in the system of the animal, in a comparatively inactive state, without making any distinct outward sign of their presence. A number of cows aborting in a herd should be looked upon with suspicion and any of the following signs looked for: Swelling of the udder and vulva; separation from the balance of the herd; dulness; cessation of chewing the cud; restlessness; stamping of the hind feet; passing of a small water bag and a little later, a foetus. Sometimes both are expelled together; then again the foetus will be expelled and the afterbirth retained.

The first certain symptoms is the appearance of small red patches in the vulva. Frequent examinations should be made in this manner: have a helper hold aside the tail of the cow, heifer, or calf, and, with your two hands, open the lips of the vulva. The appearance of small red patches on the lining membrane of the vulva is unmistakable evidence that the animal is infected and in condition to spread the disease. Service of the herd bull to a cow or heifer showing these symptoms will infect the bull and render him in condition to spread the disease to your entire herd and other herds where he is used.

If in the pregnant cow or heifer there appears with the red patches in the vulva, a secretion of white matter, prompt action should be taken, as she is in bad condition.

Swelling of the udder and vulva at any time before the last month of pregnancy, are advanced symptoms of abortion, and the crisis may come at any time.

When the first appearance of the red patches in the vulva is noticed, it is the part of wisdom to disinfect the stables and treat the affected parts of the animal showing symptoms, with Tarx disinfectant. The discovery of one diseased animal in your herd is very strong circumstantial evidence that the others are infected. They may only show poor general condition or may appear to be in perfect health, still, they should be under strong suspicion and continually watched and frequently examined.

Isolation of the infected animal is vitally important. The premises should be thoroughly disinfected, the walls, etc., should be whitewashed and the foetus and afterbirth should be burnt.

Prevention is the only way to keep contagious abortion out of your barns; great care should be exercised when buying new stock to make reasonably sure that such stock is free from the disease and only bought from a source where the disease has not existed.

Where a cow has aborted recently and is again bred, she can often be carried her full time successfully provided she is given proper care and treatment. Thorough disinfecting is necessary, everywhere, in and around the barn should be disinfected with Tarx disinfectant, walls should be white-washed and Tarx should be added to the wash. All rubbish should be removed and burnt. The cow herself should be repeatedly treated with injections of a solution of TARX. She should be well washed, especially around the base of the tail and the anus, with the same preparation. Then after she has been thoroughly cleaned externally, internal treatment should be commenced. Internal treatment should be conducted to obtain the following results. To purify the blood; to tone the various organs of the system, so that they will work as nature wants them to; to strengthen the genital

organs and remove inflammation; to furnish an abundance of mineral matter so that no part of the system lacks any.

Scientists and investigators are more and more coming to the conclusion that, though contagious abortion is a germ disease, its destructive action is confined mainly to such cows that are lacking in mineral matter, and that where this deficiency of mineral matter is made up, the disease does not manifest itself to any marked degree. International Cattle Specific is strongly recommended as a tonic and conditioner and also as a source of supply of the vital mineral elements necessary to make up any existing deficiency. It must be pointed out, however, that treatment for this disease must be done consistently, giving the specific for a few days or a few weeks will not produce satisfactory results, it must be used day by day according to directions and used over a period of time.

The only treatment for abortion is prevention; put the animal into such a healthy condition that nature helps to throw off any disease germs that are in the system. Or keep them so under, that they do not have a chance of increasing and doing harm. International Cattle Specific will make your cattle healthy and keep them healthy, and thus minimize the chances of the disease recurring in those cows that have previously aborted.

Many users of International Cattle Specific state, that after they have used this specific from the time their cows were served and right through the gestation period, cows that have previously aborted have carried their calves the full time and given birth to strong, healthy calves.

Active cases of contagious abortion cannot be cured, that is; where a cow shows every symptom of the disease and is about ready to "slink her calf," no medicine or remedy will prevent this from happening, and for this reason you are advised to be on your guard against the so-called "Certain Abortion Cures"; there is no such thing.



A shortage of Mineral Matter was responsible for this



The same cow after being given daily a liberal supply of Minerals in her rations

AFTERBIRTH RETAINED

The retention of the afterbirth must be looked upon as an unnatural condition that requires attention. The afterbirth should be expelled soon after the calf is born, though it is not uncommon in cows for the afterbirth to be retained.

This condition is found not only in the herd of the poor man but also in that of the rich, the reason for it is not well understood. More often the retention of the afterbirth occurs in cows that have aborted or where birth occurs some days before the proper time. Usually a cow that has retained the afterbirth at its first calf will do so at each succeeding birth.

While a cow may appear to be little inconvenienced by the retention of the afterbirth, at the same time she is, if neglected, being slowly ruined as a milker, breeder or profit producer. She may also be acting as a hotbed for the propagation of the germs of infectious abortion and tuberculosis. These may be brought on by the decomposition of the retained afterbirth.

Never use force in removing an afterbirth, as there is great danger of serious internal hemorrhage, as well as leaving a lot of clotted blood in the womb to decompose. The use of force may result in causing an expulsion of the womb, which condition may, and often does, cause barrenness.

If a Veterinary is available have him called to attend the case, on the other hand, if no experienced help is at hand the following treatment will help:

The afterbirth should be allowed to remain until the buttons are ripe and in condition to release it by its own weight. The afterbirth in this way acts as a drainage by keeping the mouth of the womb open. This allows the contents of the womb to escape, instead of being retained by closure of the mouth.

The cow should be given a loose stall, dry, clean, and warm, with plenty of sunlight and good ventilation. A blanket may be placed on her if necessary. Plenty of warm drinks, good, clean, warm, sloppy, nourishing food containing such ingredients as will loosen the bowels and International Cattle Specific should be given her. This will enable the cow to naturally expel the afterbirth, which should be removed from the stall as soon as expelled, so as to prevent the cow from eating it.

Though International Cattle Specific is not recommended as a cure for this trouble, many cattle men have found that its use overcomes this trouble entirely, as it tones the bowels, and through its action on the genital organs, it puts the womb into a perfectly healthy condition.

As there is always a fear of decomposition, putrefaction and absorption of the decomposing mass it is necessary to use a wash such as Tarx, for douching the vagina while the afterbirth is retained, and even after it has been expelled. Powerful, poisonous solutions should never be used as there is always the fear of absorption and further injury to the cow.

RAISES PRIZE WINNERS ON "GROFAST"

Ingersoll, On.

Dear Sirs—I have used your Stock Specifics for the last three years with good results. I can especially recommend your **Grofast Calf Meal** to those who are endeavoring to raise good stock with the least possible cost.

The calves I raised last year on your Calf Meal took first, second and third prizes at Ingersoll Fair last fall in keen competition, as my herd are all purebreds. I raise all my calves, and to raise them exclusively on milk would make it very expensive, and I find your Calf Meal an excellent substitute.

The Sire at the head of my herd is King Johanna Ranwerd, whose two nearest dams average 27,200 pounds of milk in one year, and 1,060 pounds of butter. Wishing you every success, I remain.

(Signed) W. B. Poole

GROFAST MAKES THEM GROW



THESE two up-standing pure-bred Hereford Calves would certainly gladden the heart of any lover of good stock. They are only seven weeks old and are being raised on Grofast Calf Meal. Mr. John Elliott, of Fenelon Falls, Ont., has this to say about Grofast Calf Meal: "I might say my pure-bred Hereford Calves are doing remarkably well on Grofast Calf Meal. I have used this meal for two years, with excellent results." Grofast Calf Meal produces wonderful results, and everywhere that it is used the same excellent satisfaction is obtained.

DISEASES—Continued

APPETITE DEPRAVED Cattle thus afflicted have a strong desire to eat bones, dirt and filth, lick walls, chew fence rails, etc., a desire that a healthy animal does not have. This condition may arise from many causes, the chief of which is a lack of mineral matter in the feed, especially during the winter months. The cow that is milking heavily and, possibly carrying a calf at the same time, requires an abundance of mineral matter. Where this is not furnished, nature draws on the animal's system for its requirements, naturally resulting in a greatly depreciated store of mineral elements. These minerals are extracted from the bones, resulting in the cow becoming generally in a rundown condition. It stands to reason, that where a drain of this kind exists, that at the first opportunity cattle will immediately try and obtain mineral matter from any source possible. For treatment, give good, clean, wholesome feed, and give International Cattle Specific morning and night, thoroughly mixed with the feed according to the directions. Often it may take quite a while to overcome this condition, especially if it is of long standing; but we know of many cases of chronic bone eaters that have been benefited after a course of International Cattle Specific.

BARRENNESS Barrenness, sterility, or failure to breed in cows and heifers, is due either to imperfect, unnatural, or diseased genital organs.

A reasonably healthy cow or heifer that is bred once or twice at different periods of heat to a reasonably healthy bull and fails to get in calf, should be looked upon as barren, unless it may be the fault of the bull, which is very seldom the case. This can be determined by breeding the bull to several of the cows and watching the results. If any of these conceive, that proves that the bull is not at fault.

Barrenness may result from an unnatural condition of the organs, such as a swollen and inflamed condition of the genital organs, or it may be brought about by retention of the afterbirth. The genital organs may become diseased from several causes, chief of which is neglect, catarrhal condition of the mucous membrane of the womb and vagina. A cow served while this condition exists may reasonably be expected not to conceive.

Often barrenness may result from a cystic ovary, or a small growth, in which case the services of a Veterinary Surgeon is necessary, as this can be

overcome by proper treatment, such as massaging and proper manipulations.

Often it has been found that the consistent use of International Cattle Specific will help a cow that has been considered barren, this does not apply to all cows, but only such as are in a rundown condition and cannot get into calf through weakness of the parts.

BLOATING This trouble may be known by the swelling of the left flank. This swelling rises above the level of the back-bone, and when tapped with the fingers sounds like a drum. There is always great danger of smothering. For this reason a trocar should always be kept on hand.

Treatment: The animal should be tied up and compelled to stand on a box or platform which will elevate her front parts from 6-12 inches. A drench, consisting of two ounces of turpentine mixed with one quart of raw linseed oil should be given at once, this drench should be repeated in one hour's time if bloating has not subsided. If no relief is obtained the rumen must be punctured with a trocar. The point of this operation is on the left side just mid-way between the point of the hip and the last rib. Point the trocar inward and downwards; before inserting the instrument should be dipped in a solution of Tarx or some other good disinfectant.

BRONCHITIS Bronchitis is an inflammation of the mucous membrane of the bronchial tubes. It is commonly known as catching cold; but it is more often brought on by foreign bodies such as medicine, gruels, salts and oils being given to cattle as a drench. In bronchitis there is usually a loss of appetite, a rise of temperature, (generally 104-105) and the breathing is incomplete, short, quick, and painful. The pulse is increased and often a painful cough is present.

Treatment: The affected animal should be placed in a light, well ventilated box-stall, and given food of a laxative nature, such as; grass in season, and bran mash which latter should be mixed with linseed tea. Give the animal plenty of water to drink. A mustard plaster should be applied to both sides of the chest, or even better, apply Dan Patch White Liniment, cover the patient with a blanket, and give a stimulant of two ounces of Sweet Spirits of Nitre in one pint of water, giving this daily for three or four doses. International Cattle Specific should be added to the feed as it will give tone to the system.

CALF CHOLERA

This is a catarrhal condition of the mucous membrane of the bowels. It is either a disturbance of the digestive organs or a symptom of some other trouble. The scours may be due to indigestion. The surroundings of the calf have much to do with this disease, calves kept in-doors suffer to a greater extent than those running in the open air and having the strengthening influence of sunshine, pure air and exercise. Closely crowded, filthy, and bad smelling buildings are important factors in causing disease. All these tend towards reducing the activity of the digestive organs. As scours in calves is a common result of indigestion, it is therefore necessary that the digestive organs be kept in good, strong, healthy condition. Indigestion may rise from many different causes, for instance; too liberal supply of milk; too rich milk; allowing the calf to suck the first milk of a cow that has been violently excited, allowing the calf too long a time between meals, so that when it is fed it quickly overloads and clogs the stomach; feeding from dirty milk pails or buckets; feeding milk of cows fed on unwholesome food; keeping calves in cold, damp, dark, filthy pens. These are some of the causes of simple scours. In its early stages it is not infectious as it is due to digestive disturbances. However, as the condition persists and fermentation goes on the condition becomes more complicated and what was at first merely the result of irritation or suspended digestion becomes to be a genuine infectious disease, which, though commonly called scours in calves, is in reality calf cholera, which is soon carried from one animal to another causing untold losses to dairymen and breeders.

This disease generally appears suddenly. A perfectly healthy calf may be seized all at once, apparently without any change in food or care, the symptoms of this calf-diarrhoea usually appear during the first two or three weeks of life. In many cases it occurs within a few hours after the animal is born, and the calf may die within from twenty-four to forty-eight hours.

The first indication of the presence of the disease is usually the soiled condition of the tail, loss of appetite, sunken eyes, sometimes the saliva flowing from the mouth, no attempt being made to swallow it. They have a staring coat, grow thin, and lose strength rapidly, the manure is very thin and watery, it has a sour, disagreeable odor and is usually very light in color. Evacuations are frequent, and expelled with force.

Prevention of calf cholera is far more important

than the actual treatment once the disease has taken hold, and prevention should consist of proper care being given to the mother while she is pregnant so that she may be able to give birth to a healthy calf. As it is a germ disease it is very important that the calf has none of these germs in its system before it is born; besides caring for the cow, causes as outlined above should be guarded against and the daily use of International Cattle Specific should be practiced, the cow should be furnished with this Specific morning and night to keep her in a healthy condition, and the calf should also be given small doses early in life.

Immediately a case of scours is noticed the affected calf should be taken from the others; the stable or stall should be thoroughly disinfected with Tarx. All sick calves should be given a laxative, either of castor oil or raw linseed oil from one to four ounces according to size, this should be followed by a half to one teaspoonful doses of Bismuth Salicylate, shaken up with a little warm milk and given in a drench three or four times a day, until the diarrhoea ceases. If you are unable to procure Bismuth owing to distance from a drug store any of the following are useful though not so reliable as Bismuth: Lime-water in four ounce doses twice daily, this can be made by mixing one ounce slaked Lime in one gallon of water using the clear liquor, or, instead, one teaspoonful of powdered cinnamon mixed in hot milk to be given three times daily, or, one teaspoonful doses of powdered chalk mixed with warm milk may be used instead, this also should be given three times daily.

As much of this trouble results from improper feeding, it is strongly recommended that young calves be reared on Grofast Calf Meal. This scientifically prepared feed places no extra strain on the digestive organs; it is easily assimilated and is a properly balanced food.

ANOTHER USER WELL PLEASED

Waterloo, Ont.

Dear Sirs—This is to tell you that I was well pleased with your **Cattle Specific**.

(Signed) Sam. R. Martin

"INTERNATIONAL" FROM NOW ON

Woodstock, Ont.

Dear Sirs—I have given **International Cattle Specific** a fair trial against all other milk producers, and I am well pleased with it and now send you a further order for **International Cattle Specific**.

(Signed) John Lockhart

CALF INDIGESTION

The symptoms of Calf indigestion are—dullness, belching of gas from the stomach; sour breath; and entire loss of appetite; colicky pain, and at first, constipation, which later on develops into diarrhoea, the manure being very offensive.

If, with the indigestion there is bloating, give treatment same as for calf Cholera, commencing with a laxative, and, instead of using Bismuth, give tablespoonful doses of baking soda three or four times daily.

To prevent indigestion in calves use Grofast Calf Meal, feeding regularly and according to directions, keep all feeding utensils clean, giving the calves exercise, and also giving small doses of International Cattle Specific.

CATARRHAL FEVER or PINK EYE

Distemper, pink eye, etc., are of a catarrhal nature, the disease involves the respiratory organs or breathing organs, the alimentary canal or digestive organs. The head and eyes are frequently affected, the disease usually comes on with a chill followed by fever. The head droops; the skin is hot and dry and the coat staring and frequently very dull in appearance. Secretion of milk usually stops. Loss of appetite and loss of flesh are invariably noticed, and sometimes the eyes become blue so that the cow may hardly be able to see. In other cases the cow becomes totally blind unless prompt and proper treatment is given; tears may be noticed running down the face; the lids are swollen and inflamed; sunlight is painful to animals thus afflicted, causing them to close their eyes and keep them closed continuously.

Treatment: A laxative of Epsom Salts 1 lb. to 2 lbs. for an adult cow according to size, and from one to four ounces for calves according to size, to be given mixed in water in a drench. To relieve the irritation of the eyes an ointment consisting of one per cent. of Yellow Oxide of Mercury to be applied between eye-lids twice weekly. If this ointment is not procurable, use a wash consisting of Boracic Acid, one teaspoonful dissolved in a pint of hot water. International Cattle Specific should be given twice daily, and the stable in which the sick animals are kept should be thoroughly disinfected with Tarx.

CHOKING

Choking may result from the lodgment of some foreign obstacle in the gullet. It is recognized by slobbering, distressed breathing, and an accumulation of gas which may be noticed on the left side or paunch.

For treatment: stand the cow with her head down hill, pressing the head downward as much as possible while the attendant squeezes as much saliva out of the gullet as possible. Then allow her to raise her head, and give her one pint of raw linseed oil allowing her to swallow a little at a time. If she is not relieved in from ten to thirty minutes a one-inch hose five or six feet long may be passed gently down the gullet, care being exercised not to use force for fear of puncturing the gullet. This will also force the obstacle into the stomach at the same time allowing the gas to escape.

CASTING THE WITHERS

This is a weakness that sometimes follows calving. The first sign is that of straining, and later the presence of part or whole of the womb. In this case the womb should be placed upon a blanket; if the cow is lying down, which she usually is, wash off thoroughly with Tarx solution, after doing this, the womb may be done up in a sheet, dipped in Tarx solution and held up by an assistant, while the operator carefully pushes it back into place. It must not only be placed back, but the full length of the arm must be inserted so that it turns the horns of the womb back into their natural position, unless this is done, the cow will continue to strain.

To prevent the cow from expelling it again, a platform should be so arranged that when the cow stands on it her hind parts are raised from six to eighteen inches higher than her head; she should be compelled to stand or lie in this position until all straining ceases and she fully recovers.

During this time her bowels should be kept loose. Give one pound of Epsom Salts in two quarts of warm water in a drench and International Cattle Specific to help her appetite.

CASTRATING Calves should be castrated at any time before they are six months of age. Both before and after castrating, the scrotum, or bag should be very thoroughly washed with a solution of Tarx, and after the operation the scrotum should be well oiled with International Silver Pine Healing Oil.

COLIC OR CRAMP

This is usually brought on by drinking cold water or eating indigestible food. The animal will be noticed to be uneasy, getting up and lying down frequently, and showing signs of pain. Give as treatment, a drench consisting of two ounces of Turpentine in one and one-half pints of raw linseed oil, and follow with the daily use of International Cattle Specific.

CONSTIPATION IN CALVES

Constipation is more often noticed in newly born calves. There may be a continual switching of the tail, uneasiness and effort to empty the bowels. If nature fails to do its part, treatment should consist of giving from one to four ounces of either castor oil or raw linseed oil, also an injection of warm water, from one to two quarts, according to the size of the calf.

COW POX

This is a contagious disease and can be passed from one cow to another. The disease starts with a slight fever, which, however, is usually overlooked, and the first sign is tenderness of the teats. On examination they will be found to be redder and hotter than normal, and at the end of two or three days there appear knobs, like little peas, pale red in color, and these gradually grow larger, so that at the end of a week they may be an inch in diameter. The yield of milk is diminished. From the seventh to tenth day the eruptions form into blisters with depressions in the centre and raised margins. In a few days these ooze out, a scab forms which dries up and falls off. The animal suffers intense pain while being milked as the scabs are cracked and broken by the milker.

Liberal applications of International Silver Pine Healing Oil helps wonderfully in treating this trouble and further washing with Tarx all affected parts is strongly recommended. The milker should also thoroughly wash and disinfect his hands as, otherwise, he will carry the infection to other cows he handles.

DEHORNING

As dehorning cattle is rather a cruel, but necessary operation it is far better to prevent the horns from growing rather than clipping them after they have grown. To prevent the horns from growing in calves, it is necessary to apply a dehorning remedy when the calves are from one to ten days old.

The operation is performed as follows: The calf is caught and gently laid on its side in which position it is easily held by an assistant while the operator clips the hair off of the little knobs where the horns appear. These knobs or lumps should be dampened with water and then caustic potash should be applied by rubbing over the area two or three times for one application only. Be sure that the caustic does not come in contact with any other part of the head, especially the eyes, as blindness will certainly follow. Grease the part following the application of caustic, with lard or vaseline. The spot on which the caustic is applied should not exceed the size of a quarter of a dollar. The

calf is then turned over on the other side, and treated in a similar manner.

If this treatment is properly applied, no horns will make their appearance. Cattle should be dehorned so as to protect them from each other. If an animal is not dehorned while still a calf, the dehorning clipper may be resorted to. When the horns have been removed, the application of International Silver Pine Healing Oil will prevent any bad results from following. Cool weather should be selected for this operation.

DIARRHOEA IN CATTLE

This is usually an indication of indigestion. It comes on at all seasons of the year, but is more liable to come on during the grass season, and is more prevalent during the wet season rather than the dry, on account of the heavy growth of grass, this being hard to digest.

In ordinary cases a laxative consisting of one and one half pints of raw linseed oil will usually remove the trouble, however, in bad cases, give same treatment as recommended in Calf Cholera, except that for adult cattle the Bismuth is increased to two teaspoonfuls, three times daily, or lime water in half-pint doses, three times daily.

FEVERS

In order to detect whether an animal has fever or not, it is always advisable to use a fever thermometer, and if the temperature be higher than normal it indicates a fever. The normal temperature of a cow is 100-101 degrees. This may be due to many causes, such as inflammation of the lungs, inflammation of the throat, inflammation of the udder, etc. However, the fever should be controlled and reduced by giving the following treatment: a laxative of one and one-half pints of raw linseed oil or one pound of Epsom Salts given in a drench in water, also, two teaspoonful doses of salt petre in drinking water until five or six doses have been given. Should there be any inflammation such as, of the lungs or throat, relief can be obtained by applying Dan Patch White Liniment to the parts.

FINDS "GROFAST" CHEAPER TO USE

Barrie, Ont.

Dear Sirs—I can recommend your **Grofast Calf Meal** to anyone as a most satisfactory and economical substitute for milk for raising calves. My stock are all pure breeds, therefore, I raise all my calves; to do so on whole milk would be very expensive. I find **Grofast** just as satisfactory, and much cheaper to use.

(Signed) Geo. C. Coles

FISTULA A Fistula is a pus cavity, containing matter, and is commonly known as a running sore. It may appear on any part of the body, limbs or feet.

For treatment, open the parts so as to allow the matter to flow freely, wash out the cavity at least once daily with Tarx disinfectant and follow by injecting a quantity of International Silver Pine Healing Oil and give International Cattle Specific to tone up the system and purify the blood.

FOOT DISEASE OR SORE FEET IN CATTLE

May be due to several causes; but the one kind which is generally found, is due to cows standing on cement floors, or running in wet, boggy pastures. The feet usually crack between the claws, swell, and become inflamed, in either case the treatment is the same and consists in washing the sore or inflamed feet with a solution of Tarx disinfectant, and applying International Silver Pine Healing Oil to all open sores or inflamed parts. If a growth of proud flesh appears between the hoofs or on any part of the limbs it should be treated by frequent applications of powdered blue stone, also the inflamed or sore feet should be poulticed once daily; this poultice may consist of either bran or linseed meal made into a thick paste, with hot water and should be applied quite hot, yet not so hot as to burn the animal.

International Cattle Specific should also be given twice daily in the feed, as this Specific helps to tone the system, and purify the blood. All affected animals should be kept on a dry lot which is free from gravel and stones, and should not be made to walk any distance.

GARGET-CAKED UDDER

Garget is a very common and annoying disease, it is due to many causes; such as, walking cows for any distance when their udders are heavily stocked with milk; or leaving the cow stand in a draft after she has calved will result in garget. It is sometimes also due to the condition of the blood, and for this reason International Cattle Specific should be given freely according to directions. For treatment: The udder should be rubbed twice daily with Dan Patch White Liniment after the bag has been well fomented with hot water, care being taken that the water is not too hot. The udder should be milked out thoroughly several times a day, all milk, clots, etc., must be removed. In very severe cases a bran poultice should be applied to the udder, this can be done by placing a band around the cow's body

and udder; care should be taken that the poultice is not too hot so as to scald the animal. Warm water should be added to the poultice from time to time—this can be done by pouring some from a kettle or other spouted utensil. A drench consisting of one to two pounds of Epsom Salts, according to the size of the animal, should be given, dissolved in two quarts of water; this will help to keep the cow's bowels open. The chill should be removed from her drinking water and she should be fed a nutritious and slightly laxative feed. The animal should be kept well bedded to prevent the udder coming in contact with dampness. It is very advisable that milkers wash their hands in a solution of Tarx after milking each cow, as this will prevent the spread of the disease; stables and pens should also be thoroughly disinfected with Tarx.

GRASS STAGGERS

This is a disease brought on by over-loading the stomach with grass, as soon as the stomach becomes over-loaded indigestion sets in, which interferes with the brain, causing the animal to walk with an unnatural and unsteady gait, usually walking in circles and oftentimes staggering and falling. If she is full of gas she should be tapped with a trocar to prevent death from smothering; if noticed in time or before she falls down a drench consisting of one and one-half pints of raw linseed oil should be given, and repeated in two hours' time and also International Cattle Specific should be given daily in her feed.

GRUBS OR WARBLES

These are caused in the skin of cattle by a fly which deposits its eggs during the summer months in or on the skin of the animal, the egg being retained through the winter months in a little round sack beneath the skin, having a small opening through which the worm escapes in the early part of the following summer and develops into a fly. To overcome and prevent the development or hatching of this fly, the grub, which is found beneath the skin of the animal along the neck and back and is noticed by a swelling about the size of a boil, should be opened by squeezing them, after which inject a little International Silver Pine Healing Oil with an oil can or any other convenient article, the best time to do this is during the early part of spring.

WELL PLEASED

Seaforth, Ont.

Dear Sirs—I am very well pleased with your Cattle Specific. (Signed) Louis Devereaux

INDIGESTION Indigestion may be due to many causes; such as cold water, feeding musty, bulky, fibrous food, often it is a result of irregular feeding. For treatment: give International Cattle Specific thoroughly mixed in the feed, first commencing treatment by giving the animal a laxative consisting of one pint to a pint and a half of raw linseed oil, or one pound to two pounds of Epsom Salts, according to size of animal, dissolved in water and given as a drench.

INFLAMMATION OF THE LUNGS This disease may be known by the presence of hard breathing, the animal stops as though exhausted, and extends the neck and head, dilates the nostrils; turns the limbs or elbows out on either side of the body, while at the same time it appears to be in very much distress. The breathing may be rapid and short, the temperature should be taken and is usually found high. For treatment—give the same treatment as recommended for fever.

INFLAMMATION OF THE WOMB This is a very serious and obstinate disease the treatment for which consists of applying mustard plasters over the loins, and giving warm injections of Tarx solution *per* vagina two or three times a day, a quantity of lard should be introduced after each injection. Often the use of packs of hot salt applied over the kidneys has proved beneficial. The daily use of International Cattle Specific is strongly recommended as it helps to tone the system and purify the blood.

INFLAMMATION OF THE JOINTS This ailment is very often found in the joints of the feet, though it is common in all of the joints. A thorough application of Dan Patch White Liniment will be found most effective.

LUMP JAW The first appearance of lump jaw is noticed through an enlargement of the jaw, or enlargements of the glands of the throat which are just back of the angle of the jaw, at first they may be loose from the jaw, but later on become adhered. This swelling of the jaw or of the glands when broken will discharge a yellowish sticky pus. As a result of the swelling the teeth may be pushed out of their natural position, resulting in the animal not being able to properly masticate its feed, and it will soon run down in flesh. Decaying of the bone often results in the destruction of the tooth socket so that the teeth will often fall out.

Every swelling on the jaws of cattle should be regarded as possibly lumpy jaw. The disease is due to a germ, and the pus that is discharged is of a highly infectious nature.

Treatment consists of thoroughly washing the parts with Tarx and giving the animal one-half to one teaspoonful doses of Iodide of Potash in the drinking water twice daily. This should be given over a period of ten days, or until the enlargement is absorbed. Should a dry, scaly condition of the skin appear, the Iodide of Potash should be discontinued. Also give International Cattle Specific to aid digestion and increase the appetite. The enlargements on the jaw should be painted with International Compound Absorbent, and if there is any opening from which pus is being discharged, International Silver Pine Healing Oil should be injected into the cavity.

LICE These are small insects that infest live stock and do a great deal more damage to them than the average stockman realizes.

If stock owners only knew just how much untold agony, to say nothing of the loss of flesh, and the eating up of profit that lice cause, he would spare no effort to destroy these pests.

Lice are blood-sucking parasites, and by biting the cow and sucking the blood they cause a great deal of skin irritation. Furthermore, they act as a drain on the vitality of the animal, through the loss of blood they extract. Lice are transmitted from one animal to another by direct contact, or by contact with infected bedding and quarters.

Treatment should not end with the infested animal, this will give a measure of relief, but, unless all surroundings, woodwork, posts, etc., are thoroughly treated, infected bedding, etc., destroyed, it is not very long before the cows are just as lousy again.

During the hot weather, the cows should be treated with a spray of Tarx disinfectant and animal dip, and should also be thoroughly dusted with International Louse Killer Powder, this powder will positively kill lice and other vermin, yet will have no irritating or injurious effect on the skin of the animals.

The stables and stalls should be thoroughly whitewashed and Tarx should be added to the wash, further, a liberal sprinkling of Tarx should be applied to the floors, to all woodwork, etc., besides this, all brushes, blankets, and other articles likely to harbor lice should be thoroughly treated with Tarx. This is positively the only way by which lice can be eradicated. Leave a few and in a few weeks' time they are just as bad again.

Prevention is better than cure. If you have a clean herd, see that they remain clean, thoroughly examine all newly purchased Stock to see if they are free from lice and other diseases, if any are found they should be treated before being turned in with the rest of the herd.

MILK BLUE This is due to an impoverished condition of the blood, and treatment consists of giving plenty of nutritious food and International Cattle Specific, often a change of food and this Specific will overcome the condition.

MILK BLOODY—OR STRINGY This condition is due to a derangement of the system and treatment consists of giving International Cattle Specific as directed, which will help purify the blood and tone the system generally, thus helping to overcome this ailment. Give good, clean nutritious feed along with bran mash.

MILK FEVER Milking a cow before she calves, or milking her too soon after she calves will invariably bring on this trouble. Our experience covering a period of many years, in which we have observed very many cases of milk fever, has convinced us that though there may be other causes for this trouble, the main factor is as outlined above. Never milk a cow before she calves even though her udder looks as if it were ready to burst; trouble is bound to follow the milking. The same thing applies after the cow has calved; do not be in a hurry to milk her to remove the colostrum, let her calf look after that, both will benefit, the calf through the special properties contained in this first milk and the cow from the fact that the milk flow is commenced in an easy and natural manner.

A cow suffering with milk fever should be placed, if possible, in a well-drained, dry stall, and plenty of bedding should be placed under her. Unless the cow is standing, place her on her broadside and wash off her udder and teats with a solution of Tarx.

Do not drench a cow that is suffering with milk fever, especially while she is down, as there is fear of the liquid going down the windpipe and suffocating her.

If you have a milk fever apparatus, use this to inflate the udder with sterilized air, pumping air into each teat. If this apparatus is not available, use a bicycle, or automobile tire pump to which attach a milk tube or syphon. After the udder has been thus treated, raise the cow upon her shoulder by propping her up with bales of hay, never allow

her to lie on her side except when washing and treating the udder.

A few hours after she is up on her feet again, the air should be stripped out of her teats, and she may be milked a little twice a day until she gives a natural flow of milk, when she should be milked thoroughly dry at each milking. As a laxative, she should be given one and one-half pounds of Epsom Salts dissolved in water and given in a drench, but only after she is on her feet. Her feed should be of a laxative and nutritious nature, her drinking water for several days should have the chill removed from it and a reasonable amount of exercise should be given her. International Cattle Specific should be given her twice daily so as to bring the flow of milk back to natural.

NAVEL DISEASE OF CALVES This is a germ disease which affects the navel cord, occurring often soon after birth, due to the parts becoming infected by germs, which not only produce a soreness and inflammation of the navel, but also enter the body at this point, causing a swelling of the joints. This results in lameness and a gathering of matter, or pus, reducing the vitality of the animal, causing a lack of ambition, a dull sickly appearance, indigestion and scours. Unless proper treatment is promptly given the disease will cause a sloughing of the joints or death by scours. It is better to prevent this disease than treat it after it has appeared. This can be done by thoroughly disinfecting the stall in which the cow calves, and when the calf is born, the navel cord should be tied with a string dipped in Tarx and International Silver Pine Healing Oil should be applied to the navel cord daily until it dries up and drops off, and the wound heals.

Where a case of this disease appears, treatment should consist of thoroughly washing the parts with Tarx solution, the patient should be given about two ounces of castor oil and small doses of International Cattle Specific mixed in with its gruel or other feed.

"GROFAST" BRINGS THEM ALONG SPLENDIDLY

Port Hope, Ont.

Dear Sir—Am enclosing you order for more **Grofast Calf Meal**. Have been using it all winter for stock, and we find it is just all right. It certainly brings them along splendidly, and they like it very much. We do not want to be without it.

(Signed) J. W. Hawkins

RED WATER IN CATTLE

This trouble may be caused by injuries to the back, eating irritating plants; being exposed to low, damp districts, etc. The symptoms are bloody urine, associated with a high fever, and a milking cow may be troubled with a frothy condition of the milk, this having a reddish tinge.

Treatment consists of relieving the bowels of the irritating contents, by giving a drench of either Epsom Salts or raw linseed oil, this will also help to relieve the kidneys which are overtaxed. It is this overtaxed condition which produces the hemorrhage, and the result is red urine, or red water. International Cattle Specific should be given with the feed as it has a gentle action on the kidneys and helps them to throw off all poisonous waste. A complete change of feed is necessary. This should be of a nutritious and laxative nature, giving plenty of bran mashes mixed with flaxseed tea, and also allowing the animals to drink all the flaxseed tea they want.

RHEUMATISM

This is a disease due to an acid in the blood, and usually affects either the muscles or joints, or both.

Treatment consists of giving International Cattle Specific according to directions, and applying Dan Patch White Liniment to the affected parts. In very bad cases, a bran poultice will often give relief. Give nutritious and laxative feeds.

RINGWORM

This disease is due to a parasite that affects the skin only. It has the appearance of a gray, crusty condition of the skin, which soon destroys the hair follicles, and the hair falls out, leaving the skin in a dirty and scabby condition.

For treatment, give International Cattle Specific internally, and wash the affected parts thoroughly with Tarx disinfectant and apply a mixture consisting of four ounces of Sulphur mixed with a pint of oil, preferably Rape seed oil, this preparation should be thoroughly rubbed in once a day.

SKIN DISEASE

There are several forms of skin disease, such as itch, ringworm, mange, eczema, etc., and it is hard for an inexperienced person to distinguish one from another. Treat all skin disease the same as for Ringworm.

SLOBBERING

This is not a disease, but an ailment which is due to several causes, such as inflamed condition of the tongue, ragged edges of the teeth, or an overloaded stomach.

If the trouble is due to the teeth, they should be filed. If due to a swollen condition of the tongue, or from an overloaded stomach, give International Cattle Specific morning and night in the feed and also give the patient a drench of one to two pounds according to size of animal, of Epsom Salts dissolved in water.

SPRAINS

Sprains are usually brought on by violent injuries and usually affect the tendons, joints and muscles. The treatment is the same as for Rheumatism.

SUNSTROKE

This is usually brought on by overexertion, such as walking them too far or too fast. The treatment consists of sponging the animal with cold water. Keep in the shade where the air is fresh and pure. Give injections of cold water at short intervals.

SUPPRESSION OF MILK

This is not a disease, but a condition which is of greater frequency in cold weather than in warm weather, and is often due to some derangement of the system. The treatment consists of giving International Cattle Specific morning and night until the natural flow of milk is brought back.

TEAT SORE

Sore teats may be treated by applying International Silver Pine Healing Oil. This should be done after milking.

(Continued on page 30)

FINDS THEM TO DO WHAT WE CLAIM

Paisley, Ont.

Dear Sir—I have used your **International Specifics** for the past twelve or thirteen years, and find them everything the company claim them to be. I very seldom have any trouble with my stock, such as indigestion or anything of that kind. When fattening cattle or hogs I find they put on flesh much more rapidly when using the Specific, and I find the cows keep healthier and give more milk and raise better calves when using your Grofast Calf Meal. I am now sending you an order for your valuable Specifics, and after using your goods for twelve or thirteen years that will readily show you just what I think about **International**.

(Signed) J. H. Turner

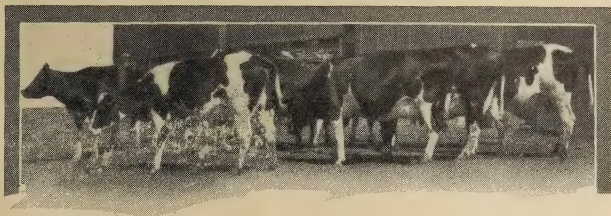
FINDS THEM WHAT WE SAY THEY ARE

Woodville, Ont.

Dear Sirs—I have used a large quantity of your products and I think I can truthfully say that they are up to all that you claim them to be, especially the **Cattle Specific**, which I have used mostly. (Signed) A. D. McEachren

ASHGROVE STOCK FARM BEAUTIES

AT Bracebridge, in Muskoka, Ont., is located Ashgrove Stock Farm, operated by Mr. R. R. Taylor. Mr. Taylor has been running a dairy business for the past eighteen years and during that time has proven to his own satisfaction that the Holstein cow pays him the best.



At this farm will be found a splendid herd of registered Holsteins whose milk yield averages 9,000 pounds per cow per year—certainly a creditable performance.

For a number of years past all feed consumed and milk produced has been weighed and grading has been resorted to with the aid of the Babcock tester. There is no doubt that the success earned by this farm and the enviable reputation enjoyed by this herd is the result of many years of painstaking care and study, combined with up-to-date methods of breeding and feeding.

Mr. Taylor is a great believer in International preparations. We have received several letters from him and in all he praises the merits of both International Cattle Specific and Grofast Calf Meal. For instance, in one of his letters he wrote saying: "I am enclosing herewith repeat order for International Cattle Specific and Grofast Calf Meal. Your Cattle Specific is certainly keeping my cows in good tone and they keep giving a steady flow of milk; some of them we had to force to go dry. I am highly pleased with the results." Just the other day we had another letter from Mr.

Taylor in which he says: "We have used your Cattle Specific and the cows certainly have done well, have kept in good health and are not looking around this spring for old bones to chew as they were doing before using your Specific."

It certainly is a pleasure for us to receive expressions of opinion such as the one outlined above, and is proof conclusive that International preparations are doing a useful work and proving of financial benefit to users.



FINDS INCREASE IN MILK MORE THAN PAYS FOR THE SPECIFIC

Ingersoll, Ont.

Dear Sirs—As you will note by my records I have been using a lot of your stock preparations, particularly **Cattle Specific**.

A number of my neighbors have been inquiring from me as to the results I get from the use of these preparations, and I thought it was only fair that I write you as to my experience as it may be of value in furthering the sale of your goods.

With regard to Cattle Specific, might say I own from 25 to 30 dairy cows and have tested this out very carefully by feeding it regularly twice a

day with my other feed, and weighing the milk and I find that the increase in milk alone more than pays for the use of the goods, not to mention on the fact that it keeps my stock in better condition—always ready for their feed and they appear to eat with a better relish. I am sure that it helps digestion to such an extent that my stock obtain more value out of all the feed I am giving them.

The above are the results I have obtained and I can speak equally highly of your Hog Specific and your Poultry Tonic and Horse Specific, which are preparations I feed to my other stock right through the winter months, and they sure keep them in good shape, and I can highly recommend your goods to anyone. (Signed) Richard Archer

DISEASES—Continued

TUBERCULOSIS All germ diseases and especially tuberculosis, are more likely to affect animals that are in a rundown condition, such as cows afflicted with infectious abortion or retained afterbirth, than those that are in a strong, healthy condition, for the reason that the animal that lacks vitality acts as a hot-bed for the germs of disease to propagate and multiply in, while the healthy, strong, vigorous animal may ward off the disease to some extent.

Tuberculosis being largely an indoor disease, due to artificial life, such as being housed or stabled, every possible precaution should be taken for its prevention and spread. One tubercular cow, confined in a close, hot, foul, badly ventilated stable, is liable to infect all the other cattle in the same enclosure.

To prevent and guard against this disease, absolute cleanliness is necessary.

Sunlight is the greatest cleanser of germ life and disease, for this reason see that plenty of sunlight is admitted into the barn; ventilation is another important factor, these two combined with cleanliness, pure water, and proper feed are essential to success in the live stock business and also for keeping cattle free from disease.

By means of the tuberculin test it is an easy matter to tell whether tuberculosis is present in a herd. It is the most reliable method of detecting the disease, even in its early stages.

The first signs of tuberculosis are generally dullness with less activity and energy; the milk is deficient in quality, it is more watery, bluish tinted and is less rich, indicating that assimilation is defective and the animal's system is slowly but surely wasting away.

If in the lungs, there is emitted a dry, deep, though feeble cough, that comes on when the animal is passing from a hot to a cold atmosphere or *vice-versa*, indicating that the mucous membranes of the air-passages are congested and irritable; in other cases the lungs may be free from traces of tubercles, but they have been discovered in other organs, the liver, kidneys, lymphatic glands and viscera. Other symptoms are tenderness over the loins, more or less stiffness in action and a sluggish, unthrifty appearance, but in order to make a correct diagnosis, the suspected animal should be examined by a competent Veterinary Surgeon, who would conduct a tuberculin test.

There is no treatment yet discovered that can be recommended for the cure of this disease; therefore, all that can be suggested is prevention, through

sanitation, ventilation, good hygienic surroundings and good food. Care should be taken to keep the animal's blood pure by daily giving International Cattle Specific.

VOMITING This trouble is due to indigestion, and the treatment consists of giving a drench of one and one-half pounds of Epsom Salts dissolved in water, to remove the undigested material from the stomach, and also International Cattle Specific night and morning to correct the digestive trouble. The animal should be given bran mash and good feed, plenty of clean, fresh water should be available at all times.

WOUNDS There are many different kinds of wounds, some being due to external injuries, others the result of an improper condition of the blood. Wounds of every nature, both surface and deep seated, should be thoroughly washed with a solution of Tarx disinfectant, and International Silver Pine Healing Oil should be injected or applied to any of the following: abscesses, after they have been opened, blood blisters, fistulas, lump jaw, punctured or lacerated wounds such as are caused by barb-wire, tin, glass, nails or slivers; sore feet due to cracking; wounds left after removing large warts, etc.

Use Silver Pine Healing Oil for all such cases as cracked or inflamed skin, bruises, cracked or sore teats; bites of insects, etc.,

PROVES RESULTS BY TESTS

London, Ont.

Dear Sirs—I have used your **International Cattle Specific** during the past six months. I am a dairyman and usually have 40 to 50 milch cows. Needless to say, I am well satisfied with the splendid paying results of your Cattle Specific. It keeps my stock healthy, good appetite and digestion, and by actual test I find its regular use with the use of the same amount of feed increases the flow of milk ten per cent., and you can depend upon it I intend to continue the use of your Cattle Specific regularly.

(Signed) W. G. Brown

PROVES ECONOMICAL IN USE

St. Clement, Que.

Dear Sirs—Regarding the **International Cattle Specific** that I bought from you. I am very pleased with it. I consider that the Specific for cattle and other animals is advantageous for production and the health of them all. I recommend your products to everyone because their use signifies economy and good upkeep of the animals.

(Signed) Alfred Desbiens

WHAT SOME USERS OF INTERNATIONAL PREPARATIONS HAVE TO SAY ABOUT THE RESULTS THEY HAVE OBTAINED

ON this and other pages are expressions of opinion received from some of our customers located in different parts of the country. Space does not permit of our publishing but a few. We have thousands of letters on our files and could fill a book of this size, yes, two books if necessary. Still, these few convey impressively and forcibly the fact that International preparations are doing a splendid service and achieving remarkable results. We would like you to read them, maybe many of the writers are known to you.

IS SURPRISED AT THE INCREASE

Rodney, Ont.

Dear Sirs—Your **International Cattle Specific** is certainly good and it is worth every cent a person pays for it. I feed it to my cows and it certainly surprised me how they gained in milk.

(Signed) Laurence Dingman

SAVES HIM EXPENSES

Amqui, Que.

Gentlemen—Enclosed you will find a recommendation for your **International Cattle Specific**, which I have used for the past three years for my cows. Before you made this powder known to me, I had been obliged to have the services of a Veterinary, but ever since I have used your **Cattle Specific** for my cows, that is for the past three winters, I have had no trouble, and my cows are in good health.

(Signed) Paul Beaulieu

IS WELL SUITED

Kippen, Ont.

Dear Sirs—I must say that I was extra well suited with your **Cattle Specific** and **Calf Meal**. I fed it with care and according to directions and must say that in my stock feeding operations in the early spring, results showed up real well. I will altogether likely have recourse to it again. I may state, also, that my experience with stock feeding through six long months of winter needs to be somewhat supplemented—your supplies seem to fill the requirements.

(Signed) W. W. Cooper

GIVES "INTERNATIONAL" THE CREDIT

Barrie, Ont.

Dear Sirs—I have been using **International Preparations** for quite a while now, especially the **Cattle Specific**, and am well pleased with results. My order for more **Cattle Specific** the other day should be good evidence of what I think of it. I never had my stock thrive, look better and be easier kept in condition. As a matter of fact I have not had a sick animal in my barn during the past twelve months, and I largely give your **Cattle Specific** credit for these results.

(Signed) Geo. C. Coles

"GROFAST" BETTER THAN HE EXPECTED

Caledon East, Ont.

Dear Sirs—I may say I have used your **Grofast Calf Meal** with great success last year and met with far greater results than I expected.

(Signed) Ernest Mowat

WORTH THE MONEY

Lucan, Ont.

Dear Sirs—I used your **Stock Specifics** and found they gave splendid results and are worth the money.

(Signed) Coursey Bros.

IS WELL SATISFIED

R. mouski, Que.

Dear Sirs—In regard to the **Cattle Specific** which I have used this year, I beg to say that I am very satisfied and I am sending you my best encouragements.

(Signed) J. A. Bouillon

OBTAINS GOOD RESULTS

New Carlisle, Que.

Dear Sirs—I must congratulate you on your **Cattle Specific** for the dairy industry. I have given your products to all my animals with good results.

(Signed) Napoleon A. Babin

TRIAL ORDER LEADS TO MORE

Ilderton, Ont.

Dear Sirs—I bought **International Cattle Specific**, etc., from you last December, as a trial order and must say I have found them all entirely satisfactory.

In February, I purchased more for my cattle and hogs. As for your **Cattle Specific**, I consider my cows have produced more extra milk already since using it to pay me for the whole shipment. In fact my cows are producing more milk to-day in mid-winter than when barned up last fall.

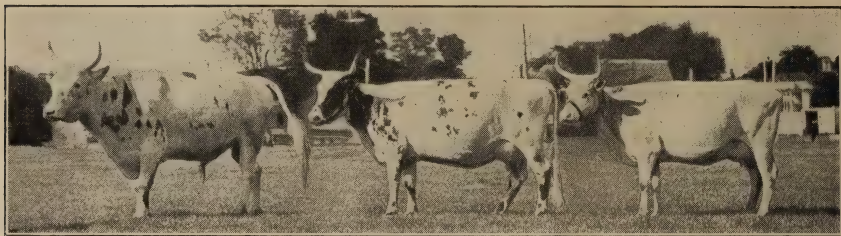
Your **Cattle Specific** is something every farmer should use for his dairy cows. It affords me great pleasure to recommend these goods to anybody.

(Signed) F. G. Bowes

Continued on page 34

A SPLENDID ACHIEVEMENT

A TRIBUTE TO THE MERITS OF GROFAST CALF MEAL



AT R.R. No. 1, Bonar Law, Ont., is located Carisbrooke Farm, owned and operated by Mr. F. M. Rutherford; on this farm are to be found some splendid Ayrshire Cattle, many of which are illustrated on this and the next page.

A great deal of credit is due Mr. Rutherford for the excellent work he has done in bringing his herd up to its present stage, and a few pointers taken from Mr. Rutherford's experience are well worth printing here.

Mr. Rutherford started farming when twenty years of age, and his first purchase was an Ayrshire heifer, from a prominent breeder, this was a wise move, as by buying a pure-bred he commenced soundly. He bought an Ayrshire because this breed appealed to him, and though he has only been breeding Ayrshires for the past eight years he has

obtained some splendid results. He states that it does not require vast sums of money to be a successful breeder; but that success comes to the man that commences right, breeds along the right lines, tests his stock on the R.O.P. test, also on the tuberculin test, and puts his stock before the public in every possible way—by this he means advertising, such as exhibiting at various fairs and agricultural meetings, etc.

Mr. Rutherford states that many breeders make a great mistake in passing out a herd sire before his worth is proven, and that where the calves are all that is to be desired, in type, size, and growing ability it is the best policy to keep the sire until his offsprings have been given a fair trial for milk production. A good sire means everything to a herd; but a poor sire means almost its ruination.





Don't buy a poor bull because it happens to be cheap. See his sire, and his dam, and discover the milk records, only in this way can the value of the animal be determined.

In 1922, Mr. Rutherford's calves were first and second prize winners at Peterboro, Lindsay, Marmora and Norwood, Ont., and Mr. Rutherford states that his calves this year are even better. In this connection it is interesting to note that all the calves born on this farm are reared on Grofast Calf Meal, what splendid calves they are can easily be judged from some of these photographs. Mr. Rutherford has this to say about Grofast Calf Meal: "I feed all my calves International Grofast Calf Meal. This food I can highly recommend as I have used it for the past three years. I would advise anyone that wishes to raise good calves to give Grofast a fair trial and note the splendid results of which I have the goods to prove by."



LIKES THEM WELL

Richmond, Que.

Dear Sirs—Your Specifics are all you claim for them. Have been using them for the last few years and like them well. (Signed) Peter J. Cleary

INTERNATIONAL CATTLE SPECIFIC

A CONDITIONER, BLOOD PURIFIER, AND AID TO DIGESTION

IT is surprising, though a fact nevertheless, that the average farmer does not make the most from each of his cows and seems satisfied with half a pail of milk from one, less from another and so on, whereas a little thought and the use of INTERNATIONAL CATTLE SPECIFIC would help him to bring the milk yield of his barn up to the maximum and maintain it at that period for a longer period than ordinary.

Every bit of feed that a cow eats and digests over and above the amount required for her maintenance goes towards milk production, therefore, to obtain maximum production she must be fed accordingly. On the other hand, over-feeding has a tendency to bring on digestive disturbances more so if the cows are barned-in for long periods, it is then that they require a conditioner that contains tonics, appetizers, aids to digestion, blood purifiers, and the minerals that are so necessary to health and proper production.

Where INTERNATIONAL CATTLE SPECIFIC is fed every day according to directions and its use kept up continuously for a period of time, disorders as outlined above will seldom or ever occur as INTERNATIONAL CATTLE SPECIFIC will help to tone up the system, purify the blood, aid digestion and better assimilate the food thus increasing the flow of milk.

For unthrifty, scraggy stockers and calves with dry dead coats, that are hide-bound, etc., or that have wintered badly, a great improvement will be noticed in a short time after putting them on a course of INTERNATIONAL CATTLE SPECIFIC.

For cows in calf, the minerals contained in INTERNATIONAL CATTLE SPECIFIC prove of marked value. These minerals are absolutely necessary for the proper health and maintenance of all Live Stock especially those that are bearing young.

To feed INTERNATIONAL CATTLE SPECIFIC regularly according to the directions means a saving in food as it promotes proper digestion, for it is not the quantity that is eaten that makes robust, fat, healthy, producing stock, but the amount that is actually digested and assimilated, therefore, we consider this true builder up of animal tissue, nerve and bone; a conditioner and tonic without an equal on the market.

INTERNATIONAL GROFAST CALF MEAL

THE MOST DEPENDABLE SUBSTITUTE FOR WHOLE MILK

FOR those who have never used INTERNATIONAL GROFAST CALF MEAL and have calves to raise, we would very strongly recommend that they give this ideal whole milk substitute a trial.

GROFAST CALF MEAL is prepared from only the purest and best feeding ingredients procurable and is so balanced that it supplies to the young calf a substitute that conforms in every respect with cow's milk. It contains feed for growth and body building and feed that supplies the necessary fat, all of which are easily digested and assimilated in the delicate stomach of the calf.

GROFAST CALF MEAL is a complete scientific whole milk substitute that may be used in the place of milk for growing calves and through its use calves may be reared from a very few days after they are born until they are six months or more of age at a fraction of the cost of whole milk.

GROFAST CALF MEAL is manufactured up to a high standard and not down to a low price, and consequently a smaller quantity of this product is needed to raise a calf than is required of an inferior and cheap substitute.

If you are raising calves feed them GROFAST CALF MEAL. If you use it according to directions you will have no trouble with Indigestion, Scours, or other calf ailments. Use it for raising all your calves and watch them thrive, develop with positively no set-backs or other calf ailments, and at the same time cut down the cost of rearing them one third or one quarter.

TESTIMONIALS—Continued

LIKE IT WELL

Stratford, Ont.

Dear Sirs—I herein enclose money order for **International Cattle Specific**, etc., I received. We like it very well.

(Signed) (Mrs.) Elizabeth Conway

OBTAINS SATISFACTORY RESULTS

Perth, Ont.

Dear Sir—I used **International Cattle Specific** all winter for my milch cows, and it gave me very satisfactory results, both for quantity of milk and quality of cream.

(Signed) John C. White.

TRIES OTHERS—BETTER SUCCESS WITH "GROFAST"

Creemore, Ont.

Dear Sirs—I have fed **Grofast Calf Meal** and had better success with it than with any other kind. I have tried a lot of different kinds.

(Signed) Walter Newton

CATTLE LOOK BETTER AS A RESULT

Warton, Ont.

Dear Sirs—I find your **Cattle Specific** all right. My cattle are looking better since I started to feed it.

(Signed) John Crawford

RESULTS MARKED AND SATISFACTORY

St. Thomas, Ont.

Dear Sirs—Does anyone in St. Thomas handle **Cattle Specific**? My supply ran out awhile ago and as I could not find any of it, I used some other brands, which were no good. The results from yours were marked and satisfactory.

(Signed) James Begg

INCREASES THE FLOW OF MILK

Markham, Ont.

Dear Sirs—**The International Cattle Specific** I got from you I think is all right for cows as it increased the flow of milk and puts them in better shape.

(Signed) J. I. Balsdon, *Director*

Markham Agricultural Society and Fair.

RECOMMENDS "GROFAST"

Howland, P.E.I.

Gentlemen—Enclosed please find cheque in payment of **Grofast Calf Meal** bought of your firm last May. I find nothing to equal **Grofast Calf Meal**, excepting whole-milk, and can recommend it above all other so-called Calf Meals on the market.

(Signed) R. H. Rayner

"GROFAST" PAYS FOR ITSELF

Norwich Ont.

Dear Sirs—I am satisfied your **Calf Meal** has more than paid for itself in the growth of my calves while using your product. (Signed) O. B. Taylor

"GROFAST" SUPERIOR TO OTHER CALF MEALS

Ridgetown, Ont.

Dear Sirs—I think your **Grofast Calf Meal** is superior to any on the market. It does all it claims to do. My calves are fat. Please send me more at your earliest convenience.

(Signed) George Louch

INTERNATIONAL HORSE SPECIFIC

THE IDEAL CONDITIONER AND BLOOD PURIFIER

FOR horses that are unthrifty, scraggy, have dry dead staring coats, that suffer with swollen legs, or have worms, the use of **INTERNATIONAL HORSE SPECIFIC** will be found of great value.

Indigestion is the commonest and most serious complaint horses are subject to and where Indigestion is allowed to continue it is only a step to other serious complications. Improperly digested foods result in stomach and bowel troubles; poor assimilation robs the horse of the life giving elements in the feed naturally resulting in poor blood, improper action of the liver and kidneys and a general clogging up of the whole system.

Seventy-five per cent. of the deaths amongst horses are due to bowel troubles—acute indigestion, (colic). To guard against such conditions periodical courses of treatment with **INTERNATIONAL HORSE SPECIFIC** will help you to keep your horses in the very best of condition and will help to prevent the possibility of serious ailments, laying your horses up especially when they are most needed.

INTERNATIONAL HORSE SPECIFIC is an ideal conditioner, tonic and blood purifier, especially for horses that are out in all weathers and working under a variety of conditions. The use of this Specific will help you to keep them thriving and fit.

Through the use of **INTERNATIONAL HORSE SPECIFIC** worms may be quickly removed. It can be given to brood mares with perfect safety both before and after foaling. Its use here will be found of marked benefit as it contains special minerals, tonics, etc., that are necessary for the welfare, health and energy of the mare. Further, the use of the tonic has a marked effect on the successful development and growth of the young colt.

If you would keep your horses healthy, keep them working hard and relishing their feed give them **INTERNATIONAL HORSE SPECIFIC**.

OBTAINS GOOD RESULTS FROM BOTH

Brougham, Ont.

Dear Sirs—Your **Cattle Specific** and **Grofast Calf Meal** are very satisfactory. I have obtained good results from the use of same. I remain,

Yours very truly,

(Signed) E. E. Perryman

“GROFAST” WORKS WONDERS

Ethel, Ont.

Dear Sirs—I got some of your **Grofast Calf Meal** from you last year and was well satisfied with it. It was the first I ever used and it did wonders. Will you please send me another bag of your **Grofast Calf Meal**.
(Signed) George Elliott

CALVES DOING REMARKABLY WELL ON IT

Mountain Grove, Ont.

Dear Sirs—I might say that my pure bred Holstein calves are doing remarkably well on your **Calf Meal**. The Stock Specifics are giving good results, also.
(Signed) Leslie D. Cox

FINDS “GROFAST” AS GOOD AS WHOLE MILK

Ingersoll, Ont.

Dear Sirs—I have used a lot of your **Grofast Calf Meal** during the past three years. From my experience it is just as good as whole milk. After my calves are three days old they get nothing but skim milk and your **Calf Meal**, and I raise equally as good calves as I ever did on fresh milk and the cost is only a fraction compared with what the cost would be raising them on milk.

(Signed) Richard Archer

HELPS COWS TO CLEAN AND DO BETTER

Ostrander, Ont.

Dear Sirs—Since using **International Cattle Specific** our cows never done better, and when they freshened every cow cleaned right up, and got right down to business, and since turned out to grass are milking the best they ever milked. I remain.
(Signed) Jasper D. Wilson

FINDS “INTERNATIONAL” THE BEST

Cowansville, Que.

Dear Sirs—I am a dairyman and am milking 14 cows, and after trying your **International Cattle Specific** I am well pleased with the results. It has kept my cows in fine condition all winter, also increased the flow of milk.

I might say I have used other brands of Stock Tonic, but find “**International**” the best, and cannot speak too highly of it.

(Signed) George Trites

COWS ARE DOING FINE

Morrisburg, Ont.

Gentlemen—I am feeding your **Cattle Specific** and my cows are doing fine, coming out in splendid condition and on less feed.

(Signed) Geo. E. Bowman

TARX SOLIDIFIED DISINFECTANT AND ANIMAL DIP

TARX is a Coal Tar Product that is put up in a solidified form in cakes which are marked off into cubes. Each cube, when dissolved in a specified amount of water furnishes a strong, reliable solution ready for use either as a disinfectant or animal dip.

It is clean to handle and makes a solution of the proper strength thus doing away with any guess-work. It may be used for sheep, for hogs, for spraying horses, cattle and for ridding poultry of lice. It positively does its work well and thoroughly.

Through a special method of manufacture the vermin killing properties of TARX are evenly distributed through the solution, so that, where it is used as a dip the first few animals treated do not take all the virtue out of the dip leaving it practically inert for the last few.

Greater and better results are obtained through the use of TARX than with the majority of liquid disinfectants which do not mix as evenly and thoroughly with water as does this preparation.

One cube of TARX makes one gallon of strong disinfectant and animal dip.

There is no waste or leakage with TARX, no bottles or cans. Being in a solid form it can be sent anywhere by parcel post, prepaid. It keeps indefinitely, retaining its strength, does not freeze and will not run.

As a general disinfectant for every purpose, around the barn, home, etc., TARX will give you great satisfaction. It is reliable, safe and certain.

Tarx is put up in boxes containing 75 cubes at \$3.00 per box and in boxes of 150 cubes at \$5.00 per box. Can be sent by parcel post to any address in Canada—postpaid.

TESTIMONIALS—Continued

SPLENDID!

Iroquois, Ont.
Dear Sir—We have used your **International Cattle Specific** and **International Horse Specific** and find them splendid. (Signed) Allen Harper

FINDS IT GOOD

Snelgrove, Ont.
Gentlemen—I must say your **Cattle Specific** was very good. (Signed) Irwin A. Ellis.

GIVES GOOD APPETITES TO MILKING COWS

St. Eloi, Que.

Dear Sirs—On Nov. 3rd I bought a quantity of **Specifics** for cows and horses. I am very pleased and pleased to have used it. It is good for building up animals and to give good appetites to milking cows. (Signed) Andre Ouellette.

NO TROUBLE AT FRESHENING

Westport, Ont.

Dear Sirs—I have bought your **Cattle Specific** for two years. I have had the very best results from it. More milk and higher butter fat, and have no trouble with my cows at freshening time, which I had for some years before using your tonic. (Signed) James Tobin & Son,

IS WORTH TWICE THE MONEY

Steenburg, Ont.

Dear Sirs—I do not begrudge you the money for your **International Cattle Specific**; it is worth twice that to me. I had one cow that was so poor that I did not think I could winter her, and since I began to feed her **International Cattle Specific** she has gained every day and she is now fit for beef. I can truly thank you for that **Cattle Specific**. I will send for more when I have this used.

(Signed) Alex. McCormack

IS GREAT STUFF

Low, Que.

Dear Sirs—I find your **Cattle Specific** is great stuff; my cattle never looked so well in the winter before, and the milkers done better than usual. I am now trying out your **Grofast Calf Meal** with a small calf. I have found it is doing well so far. (Signed) C. N. McPhail

BEST HE HAS EVER USED

Mitchell, Ont.

Dear Sirs—I have, for the last fifteen years been a user of your goods, having fed your entire line, and must say that they are the best goods I have ever fed. Each of your different preparations have given me entire satisfaction. (Signed) C. W. Hunt

HAS USED INTERNATIONAL FOR 15 YEARS

Emsdale, Ont.

Dear Sirs—I have been a user of your **Stock Specifics** for the last fifteen years, and can say I have had the best results from it, both from your **Cattle Specific** and your **Hog Specific** for fattening, and have the best calves in this section for the breed. (Signed) Wm. Worsfold.

INTERNATIONAL POULTRY TONIC

INTERNATIONAL POULTRY TONIC has been in use by Canadian Poultry Raisers for more than thirty years and is producing truly wonderful results.

INTERNATIONAL POULTRY TONIC is not merely a tonic for creating additional appetite for food, but it is prepared so as to properly care for the various organs in the hen's system. It contains tonics, blood purifiers, aids to digestion, intestinal antiseptics, energizers, conditioners, appetizers and minerals all very essential to health and proper production, especially for hens that are confined or kept on a limited range. This preparation is founded on sound common sense principles and is the result of experience gained during many years of study and experiment.

Where INTERNATIONAL POULTRY TONIC is used day by day it results in keeping poultry healthy, active and producing. Mr. Ed. E. Hillborn, of River Range Poultry Farm, Cainsville, Ontario, a regular user of INTERNATIONAL POULTRY TONIC says he is well pleased with the results he obtains through its use and that his birds lay exceptionally well all winter without any becoming sick, in fact he has never seen birds in better shape. (This is only one of hundreds of testimonials on our files).

If you have never used INTERNATIONAL POULTRY TONIC, give it a trial. You will be more than satisfied with the results in a very short time. After commencing its use you will note the difference—active, healthy birds and a marked increase in egg production.

KEEPS HIS COWS MILKING THROUGHOUT THE YEAR

Carlisle, Ont.

Dear Sirs—Your **Cattle Specific** kept my cows milking continuously throughout the year and helped to considerably increase the butter fat. I can recommend your products to everyone desiring to obtain good results.

(Signed) Charles Dieter

NO TROUBLE NOW, WITH AFTERBIRTH

Scotland, Ont.

Dear Sir—I was satisfied with the **Specifics**—had trouble with my cows with after birth. I had trouble before I started feeding it.

(Signed) Clarence Martin

FINDS A MARKED INCREASE IN THE MILK YIELD

Westport, Ont.

Dear Sirs—I am writing you a few lines to tell you of the splendid results I have had through using **International Cattle Specific**. I have used this preparation for some time past, and have found it invaluable for increasing the milk yield, and for keeping my cows in the very best of condition. I recently had two cows that were giving ropy milk, and two others that were off their feed, within a week after commencing to give them the **Specific**, the milk cleared up, and the other two were eating with splendid appetites, and are now in fine condition. There is also a marked increase in their milk. I can strongly recommend your **Specific** to all cattle men. In my own case it is the best investment I ever made, and I certainly will tell my neighbors about its merits.

(Signed) Bernard Grant

HIS HERD PRODUCING BETTER THAN EVER

Westport, Ont.

Dear Sirs—I am using **International Cattle Specific** this year for the first time, and I find my cows, the same herd, are producing more milk and a better percentage of fat than last year.

(Signed) Andrew Jordan

OBTAINS MORE MILK WITH SAME AMOUNT OF FEED

Apple Hill, Ont.

Dear Sirs—Might say I am in the dairy business and keep around thirty cows, and as you will see by your records I have fed your **Cattle Specific** for several years. I generally buy from three to five large bags at a time, and I don't like to get out of it, as I get a lot more milk with the same amount of feed, also keeping the cows healthy and looking fine. This spring I have had twenty-two cows freshen and every cow cleaned up inside of two hours. I am much pleased with your **Specifics**. Wishing you continual success,

(Signed) James Vallance

DAIRY DOING FINE

Brigham, Que.

Dear Sir—Enclosed find payment for **Cattle Specific**, which has given good results. Dairy is doing fine.

(Signed) Robert Hunter

ARE HIGHLY PLEASED

Union, Ont.

Dear Sirs—Your **Cattle Specific** is giving splendid results. My sons are highly pleased and we are recommending your goods to our neighbors. Yours very truly,

(Signed) James Blakley.



International Specifics and Tonics are packed in strong cotton bags which are again packed in jute covered sacks so that the goods arrive at their destination in a clean, dry and perfectly fresh condition. All Specifics and Tonics are packed in units of 30 lbs., namely, 20, 60, 90 and 120 lb. bags. GROFAST CALF MEAL AND GROFAST PIG MEAL are packed in 100 lb. sacks. TARS DISINFECTANT and ANIMAL DIP is packed in cartons containing 75 and 150 cubes.

**INTERNATIONAL PREPARATIONS ARE
ALL MADE IN CANADA
BY CANADIANS AND FOR CANADIANS**

A FEW INTERNATIONAL PREPARATIONS THAT HAVE PROVEN THEIR WORTH TIME AND TIME AGAIN AROUND THE FARMER'S BARN AND STABLES

For convenience in ordering we quote prices, any of these lines can be included with your order for Specifics, etc.

International Silver Pine Healing Oil	per bottle, \$.75
International Worm Powder (for horses)	per tin,	1.00
International Heave Remedy ..	per tin,	1.00
International Distemper Remedy	per pkg.,	1.00
International Gall Cure	per tin,	.60
International Colic Remedy ..	per bottle,	1.00
International " " ..	per bottle,	1.50
International Dan Patch Hoof Ointment	per tin,	.40
International Compound Absorbent	per bottle,	2.50
International Spavin Cure	per bottle,	1.25
International Dan Patch White Liniment	per bottle,	.60
International Healing Powder ..	per box,	.75
International Louse Killer	per box,	.75
International Foot Remedy ..	per tin,	.60
International Roup Remedy (for poultry)	per box,	.30
International Horse Balls (purgative)	each,	.50

TESTIMONIALS—Continued

HIS COWS ARE THRIVING

Bloomfield, Ont.

Dear Sirs—My cows never thrived the same or milked as well as they have since feeding **International Cattle Specific** (Signed) Clarence Isteed.

IS VERY PLEASED WITH RESULTS

St. Moise, Que.

Dear Sir—After two years' experience with **Grofast Calf Meal** I wish to inform you that I am very satisfied and can recommend it to everybody who raises calves. It is not expensive and gives good results. The same applies to International Specifics for horses and cows. I bought a quantity of these from you last year and am very pleased, indeed, with them. (Signed) Ovide Sirois

FINDS "GROFAST" SUPERIOR TO OTHERS

Bracebridge, Ont.

Dear Sirs—I have fed your **Calf Meal** and can say I think I have fed all makes but find yours superior to any of them, having raised three first-class calves on it and skim milk from one cow. I have used it for years and it always gave me entire satisfaction (Signed) Geo. E. Langford

RESULTS GOOD WITH HIS PURE-BREDS

Goderich, Ont.

Dear Sirs—We wished to see how your **International Cattle Specific** worked on our pure-bred Jersey cows at calving time. We see results are good and the money is well spent. (Signed) Geo. Laithwaite

INTERNATIONAL HOG SPECIFIC

THIS preparation has been manufactured by us for a great many years and is made specially for hogs of all ages. It contains valuable minerals, tonics, blood purifiers, aids to digestion, etc. It is not a feed in any sense of the word and should not be used as such, but is a supplement to the daily feed furnishing the ration with the necessary minerals and through the other ingredients it contains keeping the system in a normal healthy condition. It helps digestion thus giving the hog a keener appetite. It enables the hog's system to assimilate larger quantities of the digested nutriment extracted from the feed. It acts as a check to set-backs that are a frequent result of cramming and overfeeding. International Hog Specific is sold in bags of various sizes suitable for the requirements of the small or large herd. Contained in each bag is also a bag of International Bowel Regulator and Worm Expeller. This is part of the Specific treatment and its use is very important. Complete directions for the use of both the Specific and the Bowel Regulator accompany each bag.

These directions are very simple, are easily understood and it is highly important that they be followed out as instructed. The best of results can only be obtained by doing this.

CONSIDERS "GROFAST" THE BEST

R. R. No. 4, Acton, Ont.

Dear Sirs:—I am well satisfied with the results obtained from the use of your Specifics and I think your **Grofast Calf Meal** is by far the best I have ever used. Yours truly,

(Signed) S. H. Webster.

COWS HAVE IMPROVED

Waterdown, Ont.

Dear Sirs—My cows have improved in milk and condition since using **International Cattle Specific**. (Signed) John A. Duncan

FINDS IT BENEFICIAL

Iroquois, Ont.

Dear Sirs—Have used your **International Cattle Specific** and found it very beneficial.

(Signed) Wm. J. Gallagher

IS SATISFIED

Wallacetown, Ont.

Dear Sirs—I am very well satisfied with your **Grofast Calf Meal**, and when I run out I will have you ship me some more. (Signed) John Gilbert

IS WELL PLEASED

Carling Lake, Que.

Dear Sirs—Am writing you to order another bag of your **Cattle Specific**. I have had one bag to a show herd and am very pleased with the results. Please ship this to J. T. Ayers.

(Signed) J. M. Readhead

FINDS "INTERNATIONAL" THE VERY BEST

Pefferlaw, Ont.

Dear Sirs:—I have found your **Grofast Calf Meal** first class and your **Cattle Specific** and **Hog Specific** the very best. I enclose order for some more Specific and also some **Grofast Calf Meal**. You will see that this is the second order I have purchased this year. Yours truly,

(Signed) R. H. Sherwood.

FINDS GROFAST CALF MEAL UNEQUALLED

Ridgetown, Ont.

Dear Sirs:—In regard to your products, I can safely and confidently say that they are all and more than you represent them to be, and your **Grofast Calf Meal**, without a doubt, is unequalled on the market. Yours truly,

(Signed) Burnett MacDonald.

WOULD NOT BE WITHOUT "INTERNATIONAL"

Ayton, Ont.

Dear Sir—I would not be without your **International Cattle Specific** for any money.

(Signed) Thomas D. Gillis

CALVES DOING WELL ON "GROFAST"— WITHOUT MILK

Sherwood, Ont.

Dear Sirs—Enclosed find order for **Grofast Calf Meal**. My calves are doing excellent on it without one drop of milk. (Signed) H. S. Fierheller

WORTH THEIR WEIGHT IN GOLD

Foxmead, Ont.

Dear Sirs—Your Stock Specifics are the best. Worth their weight in gold. Never had more contented calves in my life, and couldn't be better. They enjoy **Grofast Calf Meal**.

(Signed) James E. Guthrie

FINDS IT WONDERFUL

Belleville, Ont.

Dear Sirs—Would you please send me another bag of **International Cattle Specific** for milch cows. We got a bag last spring from you and it was wonderful for getting milk from cows.

(Signed) Mrs. Catherine Jordan

INTERNATIONAL GROFAST PIG MEAL

THE most critical period in a pig's life is right at weaning time. Given proper care and feed there should be no noticeable difference in the health and progress of the little fellows, but put them on a strong ration without regard to their particular requirements and trouble is bound to follow—indigestion, scours, etc.

The change from the sow's milk to other feeds should be such that it places no undue strain on the digestive organs and should be done in such a way and with such feed that no extra tax is placed upon the system, otherwise growth will be interrupted and there will be other disorders.

With the use of GROFAST PIG MEAL, this is comparatively a simple matter. It is an ideal substitute for the sow's milk and contains in concentrated form the correct amounts of protein, fat, etc., that are necessary for proper growth and health. GROFAST PIG MEAL is made from the purest and best feeding materials procurable. Cheap inferior feeds are not suitable, in fact are positively injurious to little pigs. For this reason it more than pays to wean pigs on GROFAST PIG MEAL, if you would save yourself the loss and annoyance resulting from having a bunch of runty and unthrifty pigs. Give them a good start and a sound foundation on which to pile up flesh and fat and you will never regret using it.

TESTIMONIALS—Continued

EXCELLENT!

Williamsburg, Ont.

Dear Sirs—I have found your **Cattle Specific** excellent for my cattle, not only increasing the milk but fattening the cows.

(Signed) Henry W. Garlough

NOTHING BETTER

Thornloe, Ont.

Dear Sirs—I still use **International Cattle Specific**. Now, there cannot be anything better. I can make four pounds more butter per cow a week when using **International Cattle Specific**.

(Signed) James A. McNabb

OBTAINED SPLENDID RESULTS

Caledon East, Ont.

Dear Sirs:—I have had splendid results from your **Grofast Calf Meal**. Yours truly,

(Signed) Elgin Wellwood.

INTERNATIONAL EGG MASH

IN International Egg Mash we offer our customers a high quality feed that contains probably a greater variety of the very best ingredients than any other poultry mash that the buyer can secure. It contains the proper balance of nutrients necessary to insure a healthy, well-conditioned body, necessary to maximum egg production.

International Egg Mash is a scientific protein concentrate, compounded on a narrow nutritive ratio, which is so essential for best growth and profitable egg production.

The laying hen requires a large quantity of palatable, easily digested protein in her day's food and International contains this very necessary component in the right proportions to produce maximum results.

International Egg Mash may be fed either dry or as a wet mash, when placed in a hopper and the birds are given free access to it, they will not gorge themselves but will, throughout the day help themselves to small quantities according to their requirements.

International Egg Mash contains such feeding ingredients as the following, all of these are the very best procurable, cheap ingredients are absolutely not used. Please note the great variety of rich protein materials used.

Meat Meal. Powdered Buttermilk. Linseed Oil Meal. Alfalfa Meal. Oatmeal. Cornmeal. Bone Meal. Wheat Flour. Wheat Middlings, etc., etc.

If you are looking for a reliable mash, one that will give you the best of results, one that your poultry will relish and thrive on, it will pay you to give International a trial. International Egg Mash is put up in strong jute bags of 100 lbs., each.

HIS CATTLE NEVER LOOKED BETTER

R. R. No. 3, Dundalk, Ont.

Dear Sirs:—I have used your **Stock Specifics** on my farm for the past two years and my Cattle, Horses, etc., never looked better. I am placing another order with your representative which I want at once. Yours truly,

(Signed) Merritt Nicholls.

IS MUCH PLEASED

R. R. No. 1, Lindsay, Ont.

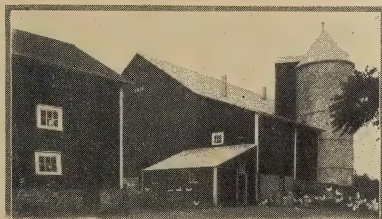
Dear Sirs:—We are much pleased with your **Stock Specifics**, especially your **Grofast Calf Meal** for calves. Yours truly,

(Signed) Robert Webster.

A FARM WHERE GOOD CATTLE ARE GROWN

ONE look at the pictures on this page is sufficient to convince anyone that here is a herd and buildings that are owned by a progressive and up-to-date farmer—such is the case.

Mr. Murray Johnson, of R.R. No. 1, Mossley, in Middlesex County, Ontario, is the farmer



who owns these splendid cattle. All told, Mr. Johnson has around 50 head of cattle, of which 30 or more comprise his adult dairy herd, beside cattle, he owns 90 or more pigs.

As a feeder and breeder this farmer has an excellent reputation throughout his neighborhood. His herd is certainly a splendid tribute to his untiring and determined efforts to produce nothing but the best.

Mr. Johnson is a great believer in employing any modern up-to-date methods of feeding, care, etc., if it will help him to improve his stock and increase production, for this reason he is a strong advocate for the use of "INTERNATIONAL," as he has learned from experience that it pays him to use

these splendid preparations, and he has this to say about them:—"After giving your different stock specifics a thorough trial, I feel it is not only my duty; but a pleasure to recommend them to every stock owner. I have had exceptionally good results from the use of your Cattle Specific. This

preparation has helped to keep my cattle in real healthy condition throughout the long winter months. I also feel that it has played a great part in keeping up the milk flow of my herd. Since using this preparation I have had no sickness amongst my cows; but on the other hand they have been eager for their food and they enjoy splendid appetites, and good digestion. As for your Poultry Tonic and Grofast Calf Meal, I feel convinced that they are unequalled in America."

Yours very truly, (Signed) Murray Johnson.

What an excellent opinion of a splendid preparation by a man who knows his business, and knows what he is talking about!



"GROFAST" IS EXTRA GOOD FOR CALVES

Hepworth, Ont.

Dear Sirs—We have found your Calf Meal extra good for calves and also notice an increase in the flow of milk since feeding your Cattle Specific.
(Signed) Wm. A. Ferguson

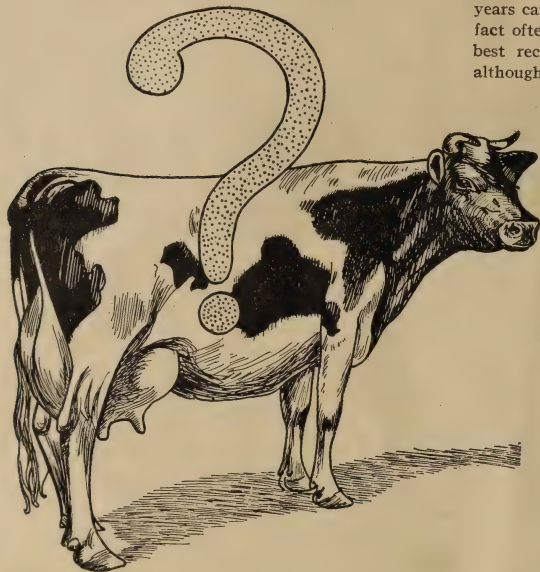
"GROFAST" KEEPS THE SHINE ON THEM

Lennoxville, Que.

Dear Sirs—I would like to say that Grofast Calf Meal is the best that I have ever used. It certainly keeps the shine on the calves.
(Signed) L. E. Coffing

THE MODERN DAIRY COW IS A MACHINE

—AND IF YOUR COWS ARE NOT GIVING ALL THE MILK
THEY ARE CAPABLE OF PRODUCING—YOU ARE LOSING



GOOD authorities estimate that even in the leading dairy counties, from one-quarter to one-third of the dairy cows do not pay for their care and feed. The chief reason why such a condition is found now, when the principles of successful selection, feeding, and care of dairy cattle have long been established by successful and practical dairymen is that the owners do not know which of their cows fail to yield enough milk to pay for their feed and care.

A dairy cow, on the average, as a two-year old may be expected to produce about 70%, as a three-year-old about 80%, and as a four-year-old, about 90% of the milk and butter fat she will produce under the same treatment when mature. The richness of milk remains practically constant from year to year, except that after the third milking period there is a slow, gradual decline with advancing years.

Probably the majority of dairy cows are rejected from the herd on account of failure to breed or from udder trouble, before the effect of advancing

years can be observed to any extent. It is a fact often observed that a cow may make her best record when ten or eleven years old, although as a rule she does her best rather earlier. If a dairy cow continues to breed she shows no marked decline until at least twelve years old.

The average good milker gives in a year's time thousands of pounds of milk and hundreds of pounds of butter fat, keeping this up year after year. Under natural conditions she would give just enough milk for her calf, and give that only as long as the calf needed it. She would then dry up and have a long rest until the period of calving came round again. To-day the cow has not only to calve, but is expected to continue milking for long periods after, therefore it stands to reason that she must be assisted not only by being fed and housed properly—but her system must be kept toned, her digestive organs must be kept healthy, and she must be kept free from disease.

The quantity of milk and butter fat the cow yields depends directly on the constitution of the animal and her inherent tendency toward milk production. Within these inherited limits, however, it is governed directly by feed, care and environment.

In a state of nature the cow provides only sufficient milk for the nourishment of her young, even though her feed be abundant. When she is liberally fed the modern dairy cow, produced through long time selection and breeding, secretes far more milk than her calf can utilize. So generous is the dairy cow that few dairymen feed to the limit of profitable production. Within wide limits, then, the quantity of milk a dairy cow yields is directly dependent on the feed and care she receives.

MAXIMUM MILK YIELD INFLUENCED BY CARE AND TREATMENT

Each individual cow of any breed has a maximum capacity, and if she is not giving that amount, then the owner is not making the most of her. For instance, if a certain cow

has a capacity for 20 lbs. of milk daily, and only gives 15 or 16 lbs., there is a loss averaging 120 to 150 lbs. of milk monthly, and, where a like condition applies to all the milch cows in a herd, the sum total of under-production annually amounts to a very large figure.

Milk production depends in a large measure on the proper digestion and assimilation of food, and only excess over and above that required for maintenance goes toward milk production.

It isn't the food in its crude state that nourishes and makes profit, it is what the digestive processes extract from it and convert into beef and milk.

GOOD DIGESTION A VITAL FACTOR

The more a cow eats and the more that's digested, the greater the production—that's it, the more that's digested. The great secret is to keep digestion toned, to obtain perfect assimilation, so that the digested elements absorbed into the system are diverted into the proper channels for milk or beef production.

The whole point is this: Cattle to be profitable **MUST** be kept under unnatural conditions. They **MUST** be given expensive feed, expensive care and in general **MUST** be under-exercised and rather overfed in order to push them to the limit of healthful production to show good profit. Every animal, to be profitable must give in the shortest possible time, the most possible marketable product.

TURNING FEED INTO PROFIT

The more feed that cattle eat, without upsetting appetites, the more money is obtained from them. Then again, there is no use to feed unless the cattle can do their part and turn each pound (over and above what is required for life and energy) into some product (Beef or Milk) that will mean **PROFIT**. Nature keeps digestion perfect so long as feed is given moderately with plenty of exercise—but nature's way won't make money for the farmer. It is the amount that's fed over and above "natural appetite" that makes money, and the problem is: How to feed for profit without upsetting the natural functions and running the risk of loss from disease.

The less an animal eats, the less it earns. The more it eats, the more it can turn into profit—provided it digests all it eats and gets the full value out of the feed. When cattle are fed heavily for heavy milk or beef production, they must be assisted, or digestive troubles are bound to arise.

HERBS, BARKS, MINERALS, ETC., ARE A NECESSITY

plants and minerals, and while off pasture, are deprived of these luxuries, and when nearly all the time standing in a small stall, without exercise to any extent, the circulation becomes sluggish, digestion and assimilation becomes impaired.

International Cattle Specific contains all the ingredients required to make up what nature provided for domestic animals when allowed to roam over hills and lowlands and graze on such mixture of food suitable to their taste and digestion. Feeding cattle daily for dairy or stall fattening with strong food, will positively impair the digestive organs and cause the stomach "to kick back." International Cattle Specific, fed every day in good food, will prevent disorders of the digestive organs and will give a keen appetite, stimulate the gastric secretion and promote assimilation.

When the food consumed by an animal has been acted upon by International Cattle Specific, proper rumination takes place, but when it is not supplied with this remedy, frequently the animal loses its cud and assimilation stops till proper digestion is restored. International Cattle Specific will tone up the system, give pure blood, perfect digestion and assimilation, increase the flow of milk, and make it high in butter fat. It will also rapidly increase wholesome flesh in stall fed cattle and impart a glossy coat; will quickly improve unthrifty, scraggy stockers and calves with dry, dead coats, hide-bound, etc., that have wintered badly. By giving them International Cattle Specific a great improvement is noted in a short time.

WHY COWS CHEW BONES, FENCE RAILS, MORTAR, ETC.

This is the result of a craving in the system for mineral matter, which is lacking in the ration fed, and which is absolutely essential if cattle are to remain healthy, keep on producing large quantities of milk and also to breed healthy and robust calves. Minerals are essential to the well-being of all live stock, and where cattle are allowed unlimited range, variety in feeds, etc., they obtain a certain amount of minerals in this way. A deficiency, however, will cause them to chew at anything that is likely to supply their body requirements.

The minerals contained in International Cattle Specific are based on nature's laws and the quanti-

Dairy cows fed on strong food day after day without access to herbs,

ties used are done with due regard for their deficiencies in cereals and concentrates.

ROBUST HEALTH AT CALVING TIME

The state of the cow at calving time directly influences the milk yield, and where the cow is in good condition, with a liberal amount of fat in her system, the butter fat yield in her milk will be correspondingly high. This fact is important, as through having cows in good condition at calving time the yearly production of butter fat shows a marked increase.

The excess fat deposited on a cow's body is not wasted, but is returned in the form of the more valuable butter fat.

MINIMIZING CASES OF ABORTION, STERILITY, FAILING TO CLEAN, ETC.

The state of health of a cow at calving time plays an important part to a great extent in so far as her future health is concerned. It is seldom or ever that a healthy, robust cow whose system is fortified with the vital mineral elements necessary for her health and welfare suffers with abortion, failing to clean, etc., and the experience of thousands of cattle owners throughout Canada is that where International Cattle Specific is given to cows for a period of six weeks to two months prior to calving, and also during the milking period, wonderful results have been obtained in overcoming sterility, and other cattle ailments that are becoming far too common and of frequent occurrence, resulting in considerable financial loss.

INTERNATIONAL DRY DIP AND DISINFECTANT

A SPECIAL compound of Germicides, Disinfectants and Deodorants put up in powdered form.

This preparation has many splendid uses—It is invaluable for destroying vermin—such as lice, ticks, fleas, insects, etc. As it is positive in its action, vermin cannot live where this powder is used. It can be used as a dry dip and vermin destroyer summer and winter; no fear of stock catching cold, as there is no water needed to use with it. Just sprinkle some on the hair of your cattle and rub it in well, or if your hogs are lousy, treat them the same way—the results are positive and immediate, yet without the least bit of injury to the animal itself.

For Poultry—It can be used as a disinfectant around hen houses; for dusting the birds for lice,

etc., and for use in the nests, in brooders, coops and everywhere that poultry frequent.

It is of great use in the garden for keeping vines and other plants free from insects and bugs.

Used in clothes' closets it will keep moths and insects away from furs and clothing. Much better to use than moth balls.

As a deodoriser and disinfectant for outside closets, for drains in and around barns and stables it will be found excellent.

Sprinkled in the bedding of Cattle, Horses, Hogs, etc., it will be of great help in keeping away disease, destroying vermin and all forms of germ life.

Put up in packages containing 20 lbs. and up, with complete directions covering all its uses.

POINTERS FOR DAIRYMEN

BEFORE AND AFTER CALVING, be sure to keep a cow's bowels open and do not feed heavily on grain. Warm the drinking water and give a warm bran mash for a few days after calving.

BREED COWS, under ordinary circumstances, from ten to fourteen weeks from the time they last dropped a calf. This will cause them to freshen regularly once a year.

BULLS that are ill-tempered or vicious very often transmit these faults to their offspring.

BULL'S QUARTERS should include a shed with a box stall in one end and with access to a good sized yard. The breeding pit can be in the shed.

BUTTERFAT IN MILK has been found by investigation to average as follows: Holstein 3.42%, Ayrshire 3.66%, Brown Swiss 4.24%, Shorthorn 4.05%, Devon 4.60%, Guernsey 5.16%, Jersey 5.35%.

CALVES destined to become dairy cattle should have the very best of care and very warm quarters during the winter. This will help greatly in developing them into better animals.

CALVES should go into winter quarters thrifty and be kept growing throughout the winter. INTERNATIONAL CATTLE SPECIFIC will help them to do it.

CALVES are seldom born with tuberculosis.

CALVES should be left with their mothers for the first three or four days so they may have the "colostrum," or "first milk".

CALVES running in the open and not closely confined are less liable to have the scours than those which are confined.

CALVES will grow very rapidly if given INTERNATIONAL GROFAST CALF MEAL. Its use will allow you to sell your milk.

CEMENT FLOORS in barns should be kept heavily bedded or your animals may have sore feet.

CLIP THE LONG HAIR off the tail and back legs of your cows and wipe off the udder and teats before milking and the milk will be cleaner.

COW COMFORT PAYS.

COWS HOLDING UP MILK should have their udders massaged before commencing to milk. It is also a good plan to let them eat something they especially like while being milked.

DAIRY UTENSILS should always be rinsed in cold or lukewarm water immediately after using them. Do not use hot water until the utensils have been thoroughly rinsed out with cold or lukewarm water. Never use rusty utensils.

DEHORNED COWS are quieter and give more milk than those with horns.

EXTRA BIG MILK YIELDS for your cows mean more money for you. **INTERNATIONAL CATTLE SPECIFIC** will help your cows to give more milk.

FLY-SWEEPS can be made by ripping up old gunny-sacks and hanging them at the doors of the dairy barn. They will sweep off the flies as the cows come in from the pasture covered with them and enter their stalls at milking time.

FROST BITTEN GRASS has little nourishment for cows. Don't turn them out in frost bitten pastures. Give them plenty of feed and don't fail to use **INTERNATIONAL CATTLE SPECIFIC** as it will keep them in good condition and increase their milk flow.

HEIFER CALVES, with proper breeding, should mature into good cows. It is estimated that fully ninety per cent will do so.

HEIFERS should be bred so as to drop their calves at from two years to two and a half years of age.

IF YOU ARE FEEDING your cows without giving them **INTERNATIONAL CATTLE SPECIFIC** every day, your feed bills are higher than they should be.

IMPURE WATER, if used for washing dairy utensils, may impart a bad flavor to milk.

KIND USAGE pays a large dividend in handling milk cows as well as other stock. The cruel or quick tempered man ought not to be on a stock farm.

LOUSY CATTLE will not thrive and will lose money for their owners. Use **INTERNATIONAL DRY DIP** and rid them of lice. (See page 44.)

MILK can be sold instead of given to the calves if you will use **INTERNATIONAL GROFAST CALF MEAL**.

MILK should not be allowed to stand over thirty-six hours before skimming.

MILK that has an unpleasant flavor often ac-

quires it after it has been drawn from the cow. This bad flavor is more often due to other causes than to the feed the cows have had.

MILK, it is stated, if placed in a red glass bottle or an uncolored bottle wrapped with red paper will stay fresh much longer than when put in an uncolored bottle.

MILK UTENSILS should be kept perfectly clean and sanitary. You may exercise extreme care in keeping cow barns scrupulously clean but all your efforts will amount to nothing unless every utensil used is kept in a perfectly sanitary condition.

POOR COWS, for either general purpose use or for dairy use are poor investments. They are liable to run their owners into debt.

POTATOES do not make good dairy feed. Experiments have shown that butter made from the milk of cows fed heavily on potatoes was of poor quality.

PURE WATER, as much as they can drink, should be supplied to cows during the summer.

RESTLESSNESS is a very poor quality either in fattening cattle or cows.

RUNNING WATER STORAGE is an ideal method for handling dairy products, and can be easily and cheaply arranged on almost any farm.

SORE FEET are liable to attend cows that stand on cement floors or that run in wet, boggy pastures.

STAGNANT WATER breeds bacteria and germs. Keep your cows away from it.

SUMMER SHELTERS should be provided for cows. Dark, well ventilated sheds will give them protection from the insects. You cannot afford to neglect this.

TICK INFESTED COWS lose one-fifth of their normal milk yields. This is shown by statistics. Save this one-fifth by getting rid of ticks through the use of **INTERNATIONAL DRY DIP**. (See page 44.)

UDDER DISEASES should always be considered contagious and cows showing symptoms of such disease should be promptly separated from the balance of the herd. This precaution will pay.

WATER that is pure, clean and fresh and slightly warmed should be given to dairy cows in the winter.

WEAK CALVES should be fed four times daily and given slightly less at a feed than if they were being fed three times per day.

WEANED CALVES should not be kept in the same stables with their mothers.

WHEN BUYING COWS it is best to have them tested for tuberculosis before turning them in with the balance of your herd.

THE HOME GROWN CALF

THE profitability of dairying depends to a large degree upon the careful rearing of the heifer calves from the best cow in the herd and sired by a pure bred bull of quality. Many dairymen, however, replenish their herds by purchasing animals for which they frequently pay high prices and which though of good appearance may not necessarily be well bred. On the other hand, careful dairymen are loath to part with their best heifers, preferring to keep them to improve their own herds. Another important reason for rearing the heifers is that it is much easier to keep the herd free from such diseases as Tuberculosis, contagious abortion when the heifers are home raised than where they are continually being bought from outside sources.

Though the value of the calf at birth depends primarily on its breeding, the feed and care it receives while young are fully as important factors in deciding its future usefulness in the herd.

The raising of calves will ever remain an art in which much depends on the skill and judgment of the feeder to study the individual requirements of the animal rather than blindly following hard and fast rules.

There is no more important feature connected with the successful rearing of calves than feeding. The young calf has a small stomach and naturally takes nourishment frequently and in small quantities. Feeding too large an allowance at one time induces indigestion and scours.

Quite as important as how and when to feed is the subject of what to feed. Farmers and dairymen who sell all their milk necessarily must have recourse to a substitute feed that will take the place of whole milk. To them International Grofast Calf Meal is strongly recommended. Grofast is an ideal substitute for whole milk, and when fed as directed very satisfactorily takes the place of the natural article. It may be used by itself as a complete feed mixed with water only, for calves from the time they are three days old or it may be used in conjunction with skim milk, where this is available. The latter addition, however, is not necessary.

Careful dairymen have demonstrated without a shadow of doubt that "Grofast" calves properly and intelligently fed develop into as good cows as those fed whole milk until weaning time.

The great importance in feeding Grofast Calf Meal lies in the fact that each feed given is uni-

form in its protein and fat content. Further, each calf so fed can be individually cared for and fed according to its requirements thus enabling each calf to obtain the maximum benefit possible from its feed.

Properly commenced on Grofast Calf Meal and later with the addition of suitable grains and roughage in liberal supply, the thrifty calf should gain from one and a half to two pounds daily for the first four to six months. The aim should be not to fatten the calf but to keep it in a vigorous growing condition, building strong bone and muscles, in fact, laying a sound foundation for future years.

Many of the reasons why calves do poorly and similarly calves given identically the same feed progress with leaps and bounds may be found in one or more of the following conditions:

Lack of sunlight and fresh air, unsanitary stalls or boxes that are not properly cleaned and disinfected, feeding too much or feeding at irregular intervals, feeding stale or chilled feed, feeding from pails that have not been scalded daily.

Common sense and care are the prime essentials for successful raising and the farmer or dairyman who adopts with these the use of Grofast Calf Meal is following the well established and beaten path to maximum success in rearing all his calves.

"Grofast" Calf Meal is a complete scientific substitute for whole milk in raising calves. Just as satisfactory as whole milk yet at a fraction of the cost. Every pound makes a gallon of rich milk-substitute.



CALENDAR SHOWING DATES OF BREEDING AND EXPECTED DATE OF CALVING FOR COWS

Jan.	Oct.	Feb. Nov.	Mar. Dec.	Apr. Jan.	May Feb.	June Mar.	July Apr.	Aug. May	Sept. June	Oct. July	Nov. Aug.	Dec. Sept.
1	7	1	1	5	4	1	1	1	7	1	7	1
2	8	2	2	6	5	2	2	2	8	2	8	2
3	9	3	3	7	6	3	3	3	9	3	9	3
4	10	4	4	8	7	4	4	4	10	4	10	4
5	11	5	5	9	8	5	5	5	11	5	11	5
6	12	6	6	10	9	6	6	6	12	6	12	6
7	13	7	7	11	10	7	7	7	13	7	13	7
8	14	8	8	12	11	8	8	8	14	8	14	8
9	15	9	9	13	12	9	9	9	15	9	15	9
10	16	10	10	14	13	10	10	10	16	10	16	10
11	17	11	11	15	14	11	11	11	17	11	17	11
12	18	12	12	16	15	12	12	12	18	12	18	12
13	19	13	13	17	16	13	13	13	19	13	19	13
14	20	14	14	18	17	14	14	14	20	14	20	14
15	21	15	15	19	18	15	15	15	21	15	21	15
16	22	16	16	20	19	16	16	16	22	16	22	16
17	23	17	17	21	20	17	17	17	23	17	23	17
18	24	18	18	22	21	18	18	18	24	18	24	18
19	25	19	19	23	22	19	19	19	25	19	25	19
20	26	20	20	24	23	20	20	20	26	20	26	20
21	27	21	21	25	24	21	21	21	27	21	27	21
22	28	22	22	26	25	22	22	22	28	22	28	22
23	29	23	23	27	26	23	23	23	29	23	29	23
24	30	24	24	28	27	24	24	24	30	24	30	24
25	31	25	25	29	28	25	25	25	31	25	31	25
26	Nov. 1	26	26	30	29	26	26	26	1	26	1	26
27	2	27	27	31	30	27	27	27	2	27	2	27
28	3	28	28	28 Feb.	31	28	28	28	3	28	3	28
29	4	29	29	1	1	29	29	29	4	29	4	29
30	5	30	30	2	2	30	30	30	5	30	5	30
31	6	31	31	3	3	31	31	31	6	31	6	31

The first Column gives the date of service. The second column, the date on which the cow should be expected to calve.



It is only due to the good results obtained through the use of International preparations that these people continue using them and use them in large quantities; they find it pays, and pays well.

"The same thing about Grofast Calf Meal, which is also excellent for replacing whole milk after a couple of weeks. It economizes very much and grows just as good animals.

"International Cattle

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A JERSEY TO DELIGHT THE EYE AND FILL THE POCKET BOOK.



of
THE HOME IN TORONTO CANADA
INTERNATIONAL PRODUCTS